

PULP & PAPER *The Cellulose Age* INDUSTRY

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North America's Wood Pulp,
Paper and Cellulose Industries.

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Newspapers Miss Another "Boat"

RECENTLY, as reported in these columns, the newsprint industry requested that OPA suspend all price controls on newsprint. The reasons need no repetition here.

In the week of April 22nd the American Newspaper Publishers Association held its annual conclave at the Waldorf-Astoria in New York City. The biggest problem that came under discussion was the supply of newsprint. But did the publishers endorse the action of the newsprint industry in its request to OPA? Did they *even take notice* of the request?

The answer to both questions is "No!"

During that whole week as the publishers wrestled with their problems there was only one timid reference to the price of newsprint. It was said that the price "might be higher." Then the assembled dignitaries hurriedly looked away from that awful possibility and speculated upon the new future sources of supply in the South.

Once again the publishers of newspapers missed the boat. Mills are turning from newsprint to book paper. To ignore the plight of the newsprint industry is not the way to stop this trend. But the publishers avoided the issue at national convention, and failed to help the case of the newsprint industry before OPA—when they might have won it for the newsprint mills.

Some newspapers are giving a great amount of space to editorials favoring the abolishing of OPA ceilings over all industries.

The support the daily newspapers have given the wood-using industries, their own source of supply, has not made a pleasant record over the long years. And now even in the crisis there is little effort to improve that record.

It is too bad for both the newsprint industry and the newspaper profession that the latter is not as far-sighted as their ever-growing competitors, the news magazine industry.

Service to the Industry

BECAUSE of the desirable qualities of the species and the extended area in the coastal plains of the Southeast at which it is found, we believe that longleaf pine will always be in the picture insofar as the pulp and paper industry is concerned.

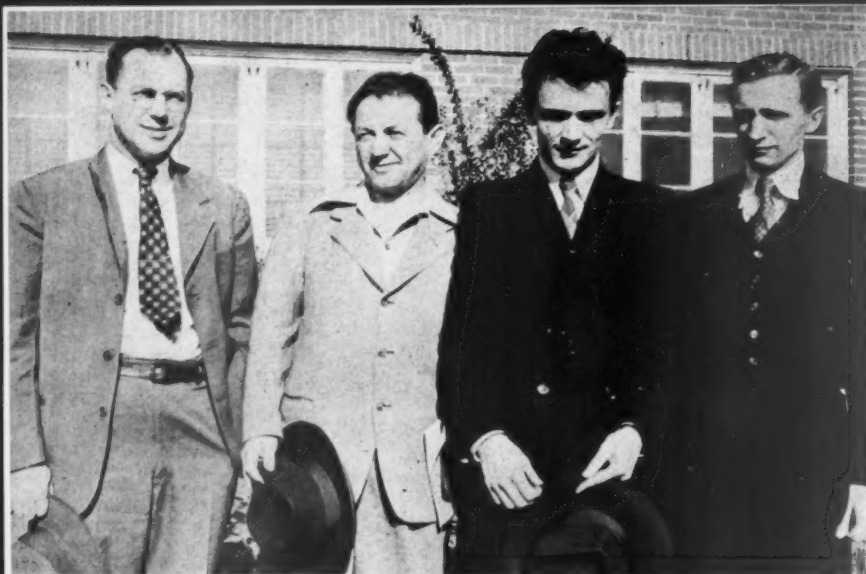
For this reason the book *Longleaf Pine* written by W. G. Wahlenberg of the U. S. Forest Service, and published by the Charles Lathrop Pack Forestry Foundation, Washington, D. C., will perform a long lived service to forest land owners.

In his preface the author, after referring to over 600 articles on longleaf pine listed in his book, quite accurately states that the collection of data by various persons and agencies had been accelerated until it has outstripped the facilities for adequate individual interpretation.

"Literally hundreds of questions in longleaf pine management remain unanswered for lack of access to information already collected," he observes.

In his presentation in summarized and available form of practical and technically developed knowledge of the longleaf pine species, Mr. Wahlenberg has not only performed a service to the industry but has produced a book which forest land owners will find to be of definite value.

H. W. PRENTIS, Jr., President, Armstrong Cork Co.—"Business cannot exist without labor, but labor cannot exist without business. There is no substitute for the dynamic vision and catalytic power of forceful management."



Here are representatives of Russian pulp and paper industry who toured many pulp and paper mills in the United States from West Coast to the Atlantic Seaboard. This picture was taken when they were visiting Union Bag & Paper Corp., Savannah, Ga., where they saw four big high-speed paper machines and a finishing plant with a battery of 150 bag machines—some capable of making 500 bags per minute.

Left to right: DR. M. L. TAYLOR, Technical Director, Union Bag & Paper Corp.; V. S. SOLOMKO, of Moscow, and I. D. TEVETKOV, of Leningrad, both paper mill engineers and operators, and their interpreter, JOSEPH TIMONIER, of New York.

RUSSIANS TOUR MILLS

Russian pulp and paper mill engineers and operators have been making an extensive visit of the United States pulp and paper industries from coast to coast.

They were accorded real hospitality by their American hosts—the managers, technicians and engineers alike—and they were given more than ordinary access to much valuable information about our equipment and manufacturing methods.

The purpose of this tour, made by I. D. Tevetkov, of Leningrad, and V. S. Solomko, of Moscow, both Soviet Russian engineers and mill operating executives, was to obtain information. They were here to see and learn as much as they could about the American pulp and paper industry, with a view of learning the most modern methods for the reconstruction of Russian mills destroyed or damaged by the German armies.

They visited the big modern Weyerhaeuser and Crown Zellerbach mills on the Pacific Coast. They traveled eastward through pulp and paper centers and a picture shown on this page was taken while they were at the huge Union Bag & Paper Corp. plant at Savannah, Ga., which is reputedly the largest combined pulp-paper operation in one locality.

The two Russians were accom-

panied by Joseph Timonier, of New York, who served as their interpreter.

Not long before this tour—during the past year—another pair of Soviet Russian engineers were touring some of the big machine shops and foundries of the United States, where much equipment for the pulp and paper industry is manufactured. These tourists were encountered by PULP & PAPER INDUSTRY during the course of their travels, which was also for the purpose of obtaining information on American manufacturing methods and techniques.

Commissar Reports on Soviet Mills

The Soviet paper industry had a tremendous expansion during the Stalin five year plans, and for volume its output has taken one of the first places in Europe, according to an official Russian report.

According to this same official source, the growth of wood pulp industry was even more rapid than paper production.

These were statements by A. Izvekov, the Assistant People's Commissar of the Pulp and Paper Industry of the U. S. S. R., published in the World's Paper Trade Review of Lon-

don. Even though he went on to detail the terrible destruction wrought upon this industry by the Nazis in occupied zones, it was inferred that the Russian industry still ranks as a new and important factor in the world picture.

According to M. Izvekov, when war came a number of old paper mills had been modernized and new ones were constructed at Syask (Leningrad region), Segezhs and Kondopoga (Karelia), Balakhne (Gorky region), Archangel, Solikamsk, Vishera and Kama (Molotov region). Paper production also increased considerably in Byelorussia and the Ukraine.

But war dealt a heavy blow to this industry, said M. Izvekov, as mills existed in a number of regions occupied by the enemy. What machinery could not be evacuated to the East was seized and shipped to Germany. For instance, 78 paper mills, with a total of 124 papermaking machines, whose output amounted to more than half the total paper production of the U. S. S. R., were in occupied territory. Losses in the pulp industry were still greater.

Baltic States Mills

In the Lithuanian S. S. R., the Germans burned the Grigiski and the Kiskinski mills.

Among paper enterprises damaged by the Germans in Estonia was the Kingisepp pulp and paper mills.

In the Karelian Finnish S. S. R., the Kondopoga pulp and paper mill, with an annual capacity of about 80,000 tons of paper, was completely demolished.

All of the Ukrainian paper mills suffered grievously. The main equipment of Malin's paper mill was blown up and buildings burnt. The Ponikovsky and Korostyshev paper mills were almost entirely destroyed by fire. The premises of the Miropol paper mill were damaged to such an extent that it has to be built anew. The Polyansk paper mill was also demolished and its equipment shipped to Germany.

In the Leningrad region, the Germans demolished the Krasnogorodsk Communal paper mills and shipped all its machinery to Germany. Of the Dubrovsk pulp and paper mills, the power station, the wood building, acid and cleaning departments, papermaking machine shop and boiler room were destroyed.

In Byelorussia, the Stalin, Vorovsky, Peaterovo and Lenin cardboard factories were completely demolished and the Spartak and Red Star mills badly damaged.



HERE IS KVP'S DISPLAY at the Packaging Exposition held in Atlantic City last month. Left-to-right are three sales executives—C. Wilson Wood, Baltimore office; George Spies, New York office, and Merle E. Wood, main office, Parchment, Mich.—and on right, Glenn Stewart, Advertising Manager of KVP. On the table in the foreground was their highly successful "audience-catcher"—a stack or two of the paper washcloths which are shown in our cover pictures this month. Bowls of water for trying out the paper cloths are on the tables. Note uses for the cloth illustrated on our cover.

Here's Something New From Kalamazoo

Our cover picture assembly this month shows a new product of Kalamazoo Vegetable Parchment Co., Parchment, Mich., which has been dubbed Kalacloth. It's a washcloth and polishing-cloth made of paper.

The way that it "caught on" with the crowds at the recent Packaging Exposition in Atlantic City, N. J., indicates that maybe KVP has actually struck upon an important new paper use.

KVP's executives make no claims of importance for their product and they even act a little embarrassed over its surge of popularity. But you can't laugh off the fact that swarms of people kept coming back to the exhibit for more "samples." Glenn Stewart, KVP Advertising Manager, took them to Atlantic City just as a novelty and was amazed by the reception they got.

There is no special secret about the sheet. It is genuine vegetable parchment. Wet fibers are put through a sulfuric bath. A special treatment makes it softer than the ordinary parchment. Because it is still parchment, it won't go to pieces in water—even boiling water. Soap and even mild acid and alkalis have no effect upon it.

The best market for this washcloth is probably the hotel industry. Individual Kalacloths for hotel

rooms could be supplied at a cost of 1½ to 2½ cents, depending on quantity ordered, and this compares favorably with a price of 5 or 6 cents for cotton cloths. About 20 hotels are now using Kalacloths.

The staff of PULP & PAPER INDUSTRY of New York, Seattle, Chicago and New Orleans offices have been trying out Kalacloth and all of them, including the secretaries (who ought to know) are "converts."

Here's a quick way to become a "convert," they say. Wet a Kalacloth (always wet it before trying to open it) and rub it over the dirtiest spot you can find in your office, such as behind a radiator. Or try it on grease on an office machine or the engine of your car. Then rinse the Kalacloth under a faucet. Dust can be shaken off without rinsing.

About the Cover Pictures

The young lady who posed for most of the pictures on our cover is Miss Jean Jones, 15-year-old daughter of H. H. Jones, one of KVP's vice presidents, who is in charge of sales promotion.

Cover pictures show uses of Kalacloth for washing dishes, washing windows, in the bath, washing enamelware and electric stoves, waxing floors, and even for alcohol back-rubs.

Mr. Jones, incidentally, literally

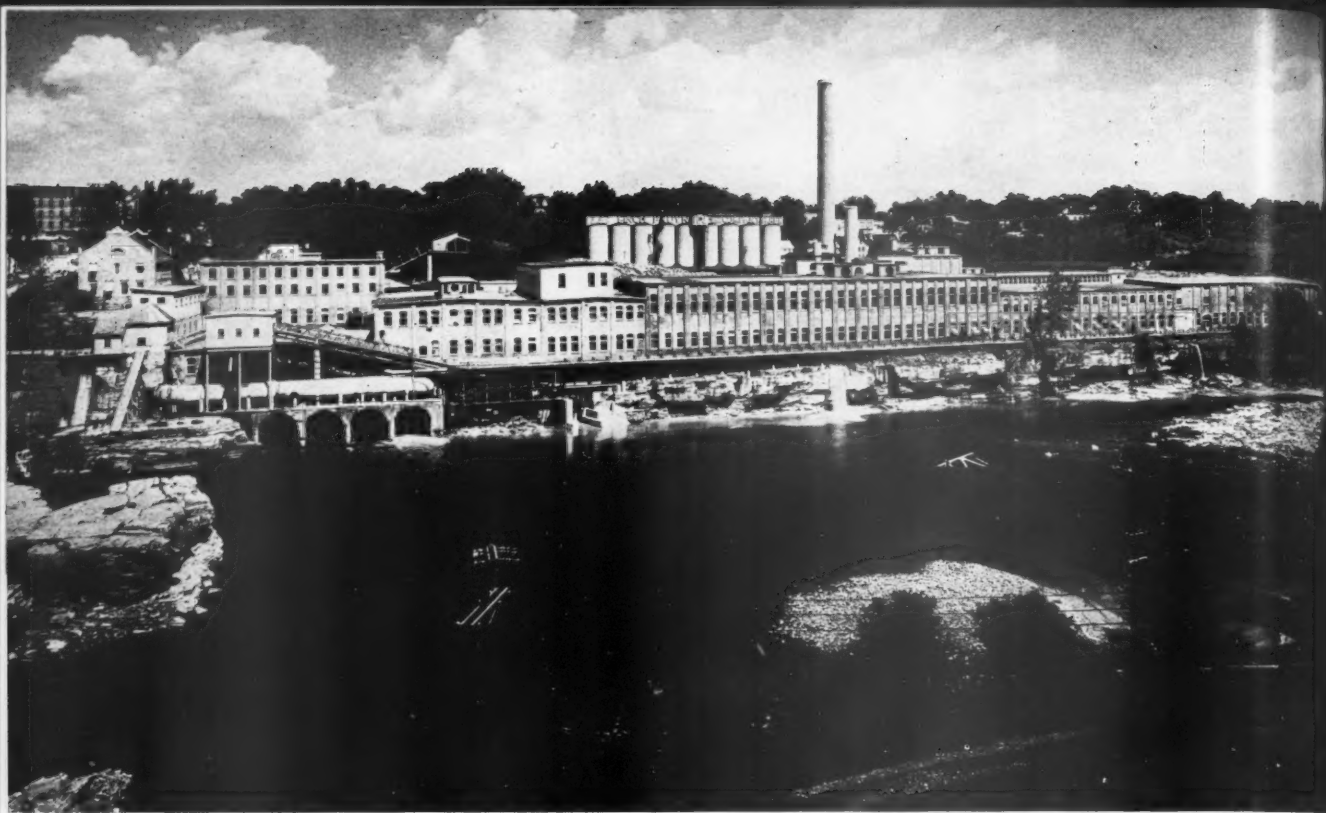
"gave his life's blood" for the product. During its initial development he personally went down to a little local machine shop in Parchment to punch out the holes in the cloths on a punch press—feeding the cloths into the press one at a time. Just a week before KVP's automatic punching equipment was ready to do this job, Mr. Jones forgot to pull his hand out of the machine quickly enough and lost the tips of two fingers. It was a bad break for him, as he was then punching the last two or three hundred of the handmade Kalacloths.

The cloth is perforated to eliminate the "grapefruit squirt" effect when squeezing dirty water out of the cloth.

The lower left hand picture on our cover—showing the two flower pots—illustrates a "by-product" of Kalacloth.

Quite a bit of confetti is produced by punching out the holes in Kalacloth. One day Mr. Jones took a sack of it down to a greenhouse near KVP's mill and had the florist spread a layer of the white dots on the top of the dirt in potted plants. To everybody's surprise, about four out of five persons buying plants wanted the ones with the "white dirt."

The perforations in the Kalacloth seem to increase the suds produced.



AN UNUSUAL VIEW OF FINCH, PRUYN & CO. mill at Glens Falls, N. Y., showing the Hudson River at a rare low ebb. Finch, Pruyn is completing its newsprint contracts between now and 1948 and will concentrate on other grades, chiefly hanging paper.

NEWSPRINT LEAVES NEW YORK

A generation ago there were 20 news machines in Glens Falls area . . . today there are none in Empire State. . . Time marches on at Finch, Pruyn, at Fort Edwards, at Warrensburg . . .

When H. F. (Bill) Bullard, vice president and secretary of Finch Pruyn and Co., was a young man there were more than 20 newsprint machines in the Glens Falls, N. Y., area. Today there is no newsprint manufactured in the entire State of New York.

Finch, Pruyn was one of the last of the mills to go off newsprint (they are still supplying 21 daily newspapers, however, by purchasing newsprint from Canada in order to fulfill their contracts) and last month Mr. Bullard told PULP & PAPER INDUSTRY about the improvements and changes in store for the mill.

New Bleach Plant

The modernization program, said Mr. Bullard in Glens Falls, will allow the historic mill to manufacture not only hanging paper in quantity,

but also high quality, high content groundwood papers for books, magazines, and offices and school purposes. There will be no changes in the grinder room which was rebuilt in 1934 when ten Great Northern type grinders were installed. But a complete new sodium peroxide bleach plant, as developed by DuPont, will be in operation about January first. The screen room will be rebuilt, and deckers will be modernized.

Strikes in other industries have held up much of the electrical work, and slowed the whole modernization program, but the beater room is being dismantled now and two Morden Stockmakers have arrived for installation. Linings in the new bleach plant will be engineered and installed by Stebbins Engineering Co. Chemical pulps will be treated in a Dilts Hydrapulper before re-

finement by the Morden machines. Both mechanical and chemical pulps, with clay, size, alum and color will be blended in the tile tanks of 3,000 pounds air-dry capacity. Stock for each of the three machines will be refined by high-speed Jordans.

Rebuilding Two Machines

Two of the three paper machines are being rebuilt by Sandy Hill Iron and Brass Works, Hudson Falls, N. Y., which is furnishing new head boxes, slices, and Fourdriniers. Savealls have been installed.

Mr. Bullard stated that a storehouse will be built for housing reserve supplies of pulp and chemicals, and there will be a new building for clay storage and preparation.

The mill has developed its own water power at Glens Falls, and

HISTORY OF U. S. PULPWOOD CEILING PRICES F.O.B. Car — Per Cord

	—as of Dec. 31—			as of		—as of Dec. 31—			as of
	1943	1944	1945	Mar. 1		1943	1944	1945	Mar. 1
Spruce:				1946					1946
Lake States	\$15.00	\$15.00	\$16.50	\$16.50	So. Vermont & New York	11.25	13.50	13.50	13.50
Northwest Virginia		12.80	12.80	12.80	So. New York Counties		11.25	11.25	11.25
Balsam:					South Carolina, Georgia, Florida, Alabama, Tennessee, Mississippi	7.30	8.10	8.10	9.50
Lake States	13.00	13.00	14.50	14.50	Texas, Louisiana, Arkansas	7.70	8.80	8.80	10.20
Spruce and Fir:					No. Carolina & Western Virginia	8.10	8.10	8.10	9.50
Maine	12.25	14.50	14.50	14.50	Eastern Virginia	8.00	8.00	8.00	9.40
New Hampshire	13.75	16.00	16.00	16.00	Pennsylvania	10.80	10.80	10.80	10.80
North Vermont	15.50	16.00	16.00	16.00	Maryland	9.60	9.60	9.60	9.60
South Vermont & New York	16.50	17.00	17.00	17.00	Northern West Virginia	8.80	8.80	8.80	8.80
So. New York Counties		16.50	16.50	16.50	Southern West Virginia	8.00	8.00	8.00	8.00
Hemlock:					Ohio & Northern Kentucky	7.60	8.10	8.10	8.10
Lake States	11.00	11.00	12.25	12.25	So. Kentucky, Ind. & Mo.	7.30	8.10	8.10	8.10
Maine	11.00	13.25	13.25	13.25	Illinois	7.30	8.50	8.50	8.50
New Hampshire	12.00	14.25	14.25	14.25					
Northern Vermont	12.25	14.25	14.25	14.25	Pine:				
So. Vermont & New York	11.25	13.50	13.50	13.50	Lake States	11.50	11.50	12.75	12.75
So. New York Counties		11.25	11.25	11.25	Maine	10.50	12.75	12.75	12.75
Poplar:					New Hampshire	11.00	13.25	13.25	13.25
Lake States	9.00	9.00	10.00	10.00	Northern Vermont	11.00	13.25	13.25	13.25
Maine	10.50	12.75	12.75	12.75	So. Vermont & New York	11.00	13.25	13.25	13.25
New Hampshire	11.00	13.25	13.25	13.25	So. New York Counties		11.00	11.00	11.00
Northern Vermont	11.00	13.25	13.25	13.25	South Carolina, Georgia, Florida, Alabama, Tennessee, Mississippi	6.80	7.60	7.60	9.00
So. Vermont & New York	11.00	13.25	13.25	13.25	Texas, Louisiana, Arkansas	7.25	8.35	8.35	9.75
So. New York Counties		11.00	11.00	11.00	No. Carolina & Western Virginia	7.60	7.60	7.60	9.00
Gum:					Eastern Virginia	8.00	8.00	8.00	9.40
Eastern Virginia	8.50	8.50	8.50	9.90	Pennsylvania	10.80	10.80	10.80	10.80
Hardwoods:					Maryland	9.60	9.60	9.60	9.60
Lake States (birch)	9.00	9.00	10.00	10.00	Northern West Virginia	8.80	8.80	8.80	8.80
Maine	11.50	13.75	13.75	13.75	Southern West Virginia	8.00	8.00	8.00	8.00
New Hampshire	12.50	14.75	14.75	14.75	Ohio & Northern Kentucky	7.60	8.10	8.10	8.10
Northern Vermont	12.75	14.75	14.75	14.75	So. Kentucky, Ind., Missouri and Illinois	6.80	7.60	7.60	7.60

owns its own spruce timberlands in the Adirondacks.

Finch, Pruyn's transfer from newsprint to other grades began officially last January, some 40 years after it made its first newsprint in 1905. The third machine was added in 1910, and throughout its four decades the No. 1 product has been newsprint. The second has been hanging (wall) paper like many mills in that area. Manufacture of groundwood paper specialties was begun in the early Thirties with the reduction of newsprint demand and the flood of Canadian newsprint.

In changing over from newsprint, Finch, Pruyn is paralleling a trend strongly exemplified throughout the area. It is a trend in which the communities along that part of the Hudson find a good deal of hope. A lively spirit is visible not only in Glens Falls itself, due to the activities of Finch, Pruyn, but in nearby towns.

"Tramp" of Feet at Fort Edwards

Once upon a time Fort Edwards was a newsprint center when International operated there, but for several years the mill has been closed. Now it is re-opening under the aegis of Marinette Paper Co., a Scott subsidiary, and the tramp of

feet resounds on Mill Street and through the wide gates again.

At the Fort Edwards mill the waxing machine is already in production, and the management expects to be in complete operation late this summer. Some of the equipment at the Marinette mill at Glens Falls is being moved to Fort Edwards and the Glens Falls operation will devote itself more wholly to conversion into four Scott products.

Changes at Warrensburg

The old Schroon River Pulp & Paper Co. at Warrensburg was another famous newsprint mill. Now—as the Warrensburg Pulp & Paper Co.—it is finding new life under the management of I. Baum and Seymour Baum, with Ed Murphy as superintendent. A 136-inch Beloit towel machine is being installed, and the mill is being completely altered into a sulfite kraft operation.

East central New York is accustomed to change and always meets it head on. Much of the Revolution was fought in the area, and it was here that the yeoman of the New World first met and defeated the trained troops from overseas.

A name like "Bloody Pond" in that part of New York means what it says, and the descendants of the

Revolution think not so much of the demise of the newsprint industry as they do about the future that lies in store for the modernized and re-opened mills.

Too, there is a lively board industry reflected in the mills of United Paperboard Co. at Thomson and Victory Mills; and American Wood Products, operated by Graham and D. E. Blandy at Greenwich.

An example of the indomitable spirit that runs along the old barge canal is Miss Anne Thorpe, an elderly gentlewoman who has been running her father's groundwood mill, the Fort Miller Pulp and Paper Co., for a quarter of a century—and has no intention of stopping now.

Two Machines Operating At Fort Edward Mill

"ScottTowels" are now being manufactured in the Fort Edward, N. Y., mill which Scott Paper Co. bought from International Paper Co. over a year ago and manufacture of other Scott Products will begin at the plant as soon as installation of necessary machinery is completed.

It is expected that two other paper machines, now in the course of construction, will be operating before July 1.

Although the program was delayed somewhat by difficulty in obtaining parts of equipment, two paper machines were put into operation at Fort Edward in January and December.



NEW BLOEDEL, STEWART & WELCH 165-TON SULFATE PULP MILL is being built at Port Alberni, shown here at head of long inlet on west coast of Vancouver Island.

Its position in relation to Vancouver and Victoria, main ports and cities of British Columbia, is shown. Also in relation to Cape Flattery, northwesternmost tip of the United States.

Directly south of Victoria, just across the Strait of Juan de Fuca, is Port Angeles, Wash., where three American pulp and paper mills are located. One has been regularly using sawmill slabs from Port Alberni.

WEST'S NEWEST PULP MILL RISES ON VANCOUVER ISLAND

Port Alberni, on the west coast of Vancouver Island, famous since the early days of British Columbia as a lumber port, is the location of the Pacific Coast's newest pulp mill actually under construction—a 165-ton kraft operation being built for Bloedel, Stewart & Welch, Ltd.

The pulp mill, which is planned to go into production by April 1, 1947, will be operated in conjunction with the Bloedel organization's big Port Alberni sawmill located just to the west of the pulp mill site.

The basic idea is to integrate the two units so that the pulp mill will utilize all surplus, such as slabs and other waste material from the sawmill. The Port Alberni sawmill is one of the largest tidewater mills in British Columbia and, with the other Bloedel sawmill twelve miles away at Great Central, produces some 150 million feet of lumber annually. Proposed annual production of the pulp mill is 50,000 tons.

First announcement of details in connection with the Port Alberni project was given to PULP AND PAPER INDUSTRY a few days ago by Prentice Bloedel, president of Bloedel, Stewart & Welch, Ltd., at his Vancouver, B. C., office.

While Mr. Bloedel has general direction over all his company's operations in British Columbia, including sawmills, shingle mills, logging camps and vast timber holdings, he has for several years taken a special interest in the pulp mill enterprise—an interest shared by



J. D. BLOEDEL, one of the outstanding pioneers and most prominent operators in the Pacific Coast forest industries. He is Chairman of the company which is building new pulp mill.

his father, J. H. Bloedel of Seattle, chairman of the board. The Bloedels, father and son, have paid many a visit in recent months to the Vancouver Island town, watching the progress of preliminary construction and checking plans with their engineers and consultants.

The lumber division of Bloedel, Stewart & Welch, Ltd., has been in operation for 35 years and is among the larger log and lumber producers of British Columbia. Presently it produces 75-80 million feet of logs and about 230 million feet of lumber each year.

S. G. Smith, first vice president, has been in charge of the company's entire lumber division since 1920. Bruce M. Farris, also a vice presi-

dent, has been in charge of lumber production since 1925.

Long ago, before World War II, the Bloedel organization planned to build a pulp mill at Port Alberni because it seemed to be even then a logical step in the company's all-round development and a worthwhile wood utilization project. However, the economic uncertainties brought about by the war resulted in holding all plans in abeyance. It had originally been planned to establish a sulfite mill, using hemlock almost exclusively, but changing market trends and other factors influenced the company to favor unbleached sulfate. Provision is being made for the installation of bleaching equipment when and if required.

"It's going to be a standard pulp mill, without revolutionary features," says Prentice Bloedel, who points out that if there is any unusual or novel element in the enterprise it is in the idea itself, because it is doubtful whether any pulp mill has been launched in this part of the world dependent almost entirely for raw material on the by-product of sawmills under the same ownership and management.

The Bloedels have every confidence in the undertaking, but they are fully conscious of the fact that they are breaking new ground, entering a new field and, in a sense, doing a pioneering job.

To Use Long Slabs

From the production standpoint the mill will have at least one unconventional point. Instead of cutting slabs down to two or four

feet lengths, which is standard practice at many west coast pulp mills, it is the intention at Port Alberni to take the slabs as they come or, at any rate, as long as practicable.

At present, most of the construction at Port Alberni has been confined to pile driving and preparation of the foundations. Considerable dredging had to be done at first, but this has now been completed. By summer, it is hoped that considerable headway will have been made in the construction of some of the main buildings—recovery plant, screen and wash room, warehouse, and so on.

Power for the pulp mill will be generated some 100 miles away, at Campbell River, flowing into Discovery Passage on the east coast of Vancouver Island. The power sta-

tions there, now being built, are an important part of the British Columbia government's hydro electric program, and they will cost some \$7 million. Transmission lines will carry the power from Campbell River across the island to Port Alberni, where a transformer station will be built by the government.

Bloedel, Stewart & Welch will consume 10,000 horsepower from this source, and as soon as it is available—April 1, 1947, is the scheduled date—the company's sawmill will shut down its steam plant fired by hog fuel and turn to electric power instead, sharing it with the pulp mill.

Water for the company's pulp mill will flow through a six-mile pipeline from Sproat Lake at the rate of 20 million gallons per day.

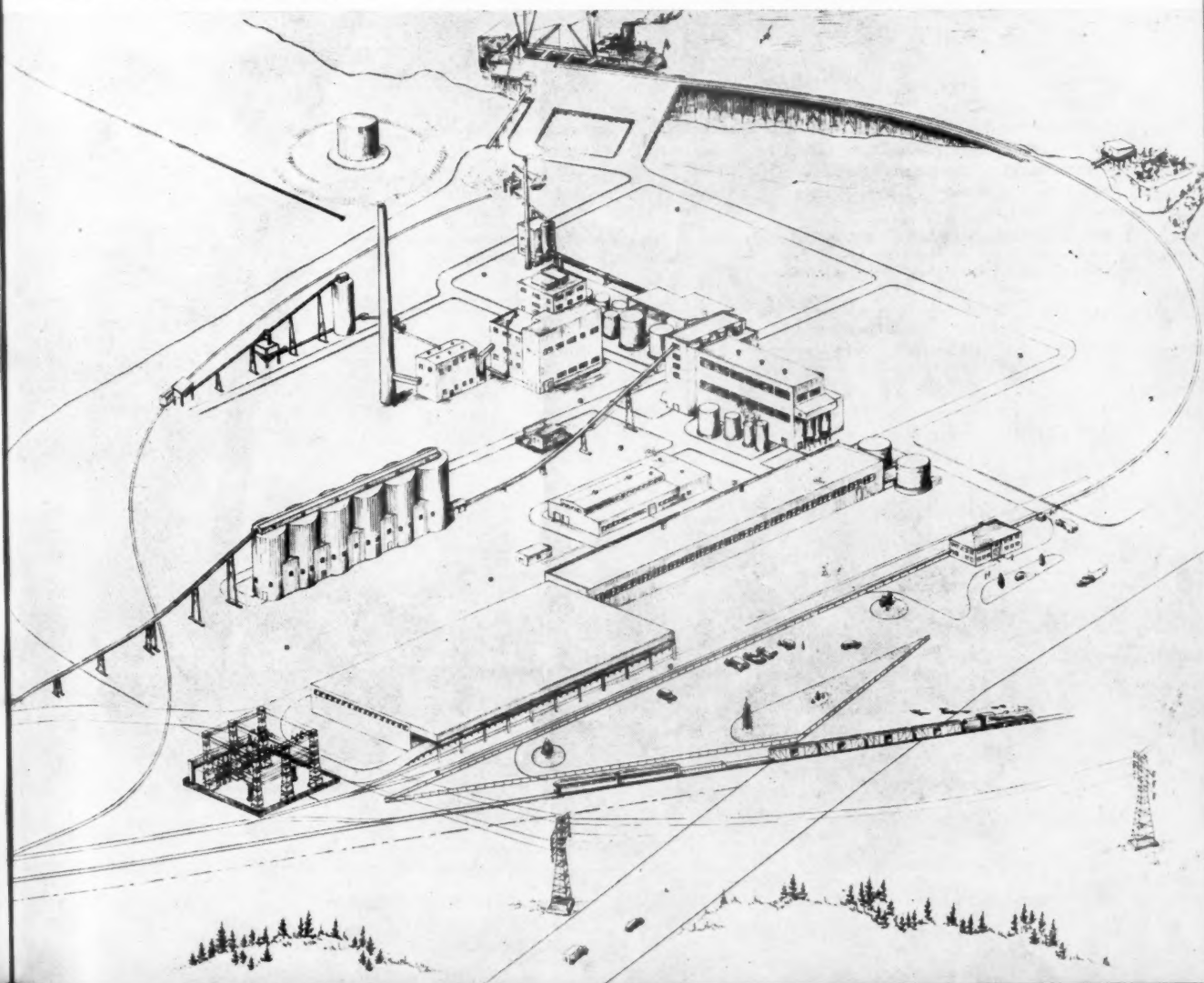
The only appointment so far made to the pulp mill's operating personnel is that of Einar Walloe, who will be superintendent. He was formerly with Pacific Mills, Ltd., at Ocean Falls and has had a wide experience in the manufacture of kraft.

Wood Resources

Bloedel, Stewart & Welch have extensive timber holdings on the west coast and interior of Vancouver Island. One of the largest blocks of timber under single ownership is held by the Bloedel organization in the Franklin River country, which is directly tributary to Port Alberni. This is primarily a logging railroad show and one of the island's biggest producers, but the company hopes to be able to develop the stand in such a way as to maintain

HERE IS AN ISOMETRIC DRAWING OF 165-TON KRAFT MILL being built at Port Alberni, Vancouver Island, for Bloedel, Stewart & Welch, Ltd. Waterfront and docks are shown in the background. Tallest building (in center) will house recovery and evaporating units, with digester and screen room to right. To the left of recovery plant is the precipitation building, with its towering smokestack to the left. To left of smokestack are salt cake or sulphur stores. In lower left foreground is power station and to its right, the low-

lying warehouse, and the long building to the right of warehouse is machine room, with repair shop just back of it. Conveyor leading to the tall, cylindrical chip storage bins is shown at the left, back of the power house. Another conveyor is seen leading from base of the last chip storage bin to top of digester house. Office is small building at extreme right center, alongside railroad spur, which leads from warehouse to docks.





PRENTICE BLOEDEL, President of Bloedel, Stewart & Welch, Ltd., who outlined program for new pulp mill to this magazine. Mr. Bloedel has traveled extensively in all regions of North America where pulp is produced during the past few years, studying methods and equipment.

a thorough-going sustained yield program.

Most of the logs feeding the Port Alberni sawmill are transported in booms from down Alberni Canal or by railroad and truck from Great Central and other points where the company operates. The "waste"

from the Great Central mill will be carried to the pulp mill by truck or railroad, whichever is found to be more satisfactory.

Operation of the pulp mill is not expected to cause any additional drain on the company's forest holdings. It will merely round out the utilization setup, making high economic use of material which hitherto has been wasted, burned as fuel or otherwise disposed of. The pulp mill will possibly provide a market for the surplus from sawmills other than those controlled by the Bloedel organization.

Description of Equipment

It has been decided to install a whole log hydraulic barker, but the type has not yet been chosen. Canadian Sumner Iron Works of Vancouver, B. C., has been awarded the contract for the chippers—a 110-inch log chipper and two 72-inch chippers for slabs.

There will be a battery of four concrete chip silos similar in construction to those at the Soundview Pulp Co. and Puget Sound Pulp & Timber Co. mills.

Conveyors will be of conventional design. They will carry the chips to the silos and from there to the three digesters, each of 4200 cubic feet capacity, to be manufactured by the Vancouver Iron Works.

The blow tank, of standard construction, will be fed by forced cir-



HOWARD SIMONS, Consulting Engineer in the Port Alberni project. He is son of late noted Chicago pulp-paper engineer.

ulation.

All washing, screening and thickening equipment is being designed and manufactured by Sherbrooke Machineries, Ltd., Sherbrooke, Quebec. Pulp from the digester will be washed by a Sherbrooke counter-current brown stock (black liquor removal) washing system. This will consist of three 8'x12' vacuum washers with Impco type intermediate submerged repulpers, all arranged as one unit.

After washing, the pulp will be screened over eight lines Sherbrooke low type flat screens equipped with

SITE OF BLOEDEL, STEWART & WELCH sulfate pulp mill is in foreground of this photograph. In background is section of Bloedel sawmill which will furnish raw material. Piles in foreground will be used for foundation of the pulp mill.





EINAR WALLOE, who has been appointed Superintendent of new Bloedel mill. He has had long experience in sulfate pulp manufacture.

Dunbar drive, each line consisting of four 14-flat screens. Subsequent thickening will be accomplished on the two 48"x132" Sherbrooke deckers.

The pulp drying machine with 144-inch trim is being installed by Dominion Engineering Co., and provision is being made for installation of a Flakt dryer of Swedish manufacture, with cutter and layboy supplied by the Lamb organization at Hoquiam. A Baldwin - Southwark press will be operated.

Evaporators will be 5-body quintuple Goslin-Birmingham machines. Recovery and causticizing units are to be built by Combustion Engineering Co. The recovery furnace will operate at 200 pounds, although its full capacity will be 650 pounds. Precipitation facilities will probably be installed subsequently.

The Dorr Co. will provide the recausticizing plant designed for continuous operation and complete with equipment for lime slaking, causticizing, white liquor clarification, lime mud washing and green liquor clarification. Lime sludge will be reburned in a Traylor lime kiln, with Oliver United sludge filter. Lime makeup will be provided by burning lime rock, obtainable on Alberni Canal fairly close to the mill.

Company's choice of pumps has not yet been determined.

Planning of the Port Alberni project has been in the hands of Howard Simons, consulting engineer formerly of Seattle and Chicago, who has been making his headquarters at the Bloedel, Stewart & Welch offices in Vancouver for the past year or so.

W. A. Reekie is chief draughtsman. Val Gwyther is pipeline engi-



Preparing site of new Port Alberni pulp mill. The picture shows raising of pile-driver for use of contractors—B. C. Bridge & Dredging Co. and Puget Sound Bridge & Dredging Co.

neer and W. R. Bonnycastle, a consulting engineer of wide experience, has been assisting. George Fletcher is purchasing agent.

Representing British Columbia Bridge & Dredging Co., Vancouver, with whom Puget Sound Bridge & Dredging Co. shares the main contract for construction are Iver G. Anderson, project manager; Fred Brown, acting general superintendent; Ivor Kriken, facility and water-

front superintendent; James Fyfe, head accountant, and Henry Ayling, in charge of personnel.

Harris Joins Bloedel Mill Staff

L. G. Harris, who recently returned from Ontario where he served for a brief period as pulp mill superintendent at Brompton's Red Rock division, is working with the engineering staff of Bloedel, Stewart & Welch, Ltd., at Vancouver, B. C.

J. H. BLOEDEL FORECAST TREND TO PULP PRODUCTION IN WEST

In the back files of this magazine—the issue of April, 1929—we find a prediction then made by J. H. Bloedel, head of one of the biggest North American forest products industries operations, which is being borne out to a remarkable degree today.

It was an interesting forecast of his own company's present undertaking at Port Alberni, which is described in the accompanying article.

Said Mr. Bloedel:

"I am willing to predict that 20 years from now loggers and lumbermen of the Pacific Coast will be pulp and paper men. That is the trend by necessity."

As the two companies he heads—Bloedel-Donovan Lumber Mills in the U. S. and Bloedel, Stewart & Welch in Canada—are engaged in logging, lumbering and shingle manufacturing he may be described as an "unbiased" observer.

It was just 16 years ago last month that he made that statement. Already in the past year, the vast timberlands of Bloedel-Donovan Lumber Mills on the Olympic Peninsula have been sold to Rayonier Incorporated and thus are being converted to pulpwood production and a continuing source of wealth and employment for many people in that region of the Pacific Northwest.

Similarly, the timberlands of such outstanding lumber companies as the Clark-Wilson and Ostrander companies in Oregon have passed to Crown Zellerbach Corp. Spalding timberlands in that state have been acquired by Oregon Pulp & Paper Co. The Crescent Logging lands in Washington are now property of Fibreboard Products, Inc. There have been many lesser transactions of the same character.

Many western pulp mills, through new developments in sulfate and groundwood pulping, are making use for the first time of rapid growth Douglas fir as well as their traditional hemlock and these processes also have made possible use of up to 20 cords an acre of small wood that formerly was burned or left on the ground.

Recovery to this extent on timberlands, as well as use of sawmill waste, is what has made possible the Port Alberni mill.

Reminded of his 1929 prediction, Mr. Bloedel explained to PULP & PAPER INDUSTRY:

"I distinctly had in mind the trend in Wisconsin, where I was born. The early ventures in lumbering were much like they were on Puget Sound, with subsequent developments in pulp, so that Wisconsin now is one of the biggest producers of pulp and paper."

FERNSTROM TO DOUBLE OUTPUT; WILL GET NEW TISSUE MACHINE

Expressing his great faith in the future growth of Southern California, and an ever-increasing demand for paper, President F. O. Fernstrom has announced a \$1,250,000 expansion for Fernstrom Paper Mills, Inc., Pomona, Calif.

Approximately \$1,000,000 is to be invested for the installation of a new paper machine (No. 3) to be manufactured by Black-Clawson Co., Hamilton, Ohio, for manufacture of fruit wraps, waxing and other tissues. Another \$250,000 will go into a new building to house it. When the expansion program is completed in late 1947 and the new machine goes into operation, the company expects to practically double its present annual production of 14,000 tons.

During planning and construction, many jobs for skilled workers of many trades will result, and when the new equipment starts rolling probably \$350,000 will be added to Fernstrom's payroll which last year totaled \$530,000.

Fernstrom Paper Mills is one of the most beautifully located paper mills in this or any other country. Orange groves surround the plant,

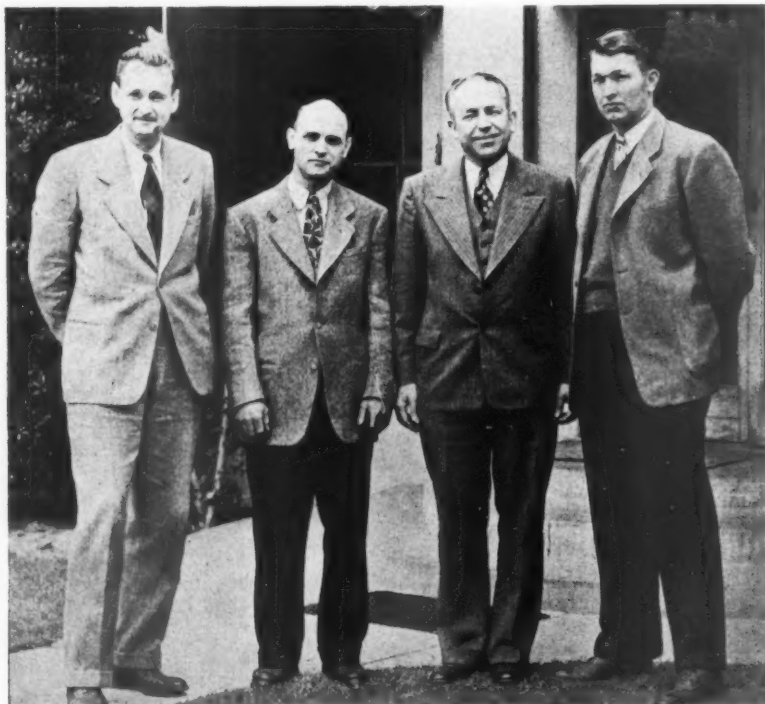


FRITZ O. FERNSTROM,
President,
Fernstrom Paper Mills, Pomona, Calif., who announced plans for third tissue machine and other mill improvements.

crowding so closely workers can almost reach out of the windows to pick the golden fruit. Now, one of those groves to the west is to be pushed back to provide several additional acres needed for the new building.

This in itself is a major item of construction, and Southwestern Engineering Co., Los Angeles, has been awarded the contract to erect a steel, fully-fireproof structure, 360 ft. long; 115 wide. It will have two stories and the location in relation to the main plant is such as

THIS COMMITTEE AT FERNSTROM PAPER MILLS, Pomona, Calif., was in charge of expansion plans which will double output, improve quality and save fiber and create other efficiencies. Left to right: DR. ROBERT A. BAUM, Technical Director; RICHARD S. BUCKLEY, Superintendent; JACK E. MAURER, Vice President and Chairman of the Committee on Expansion; and JACK D. RHODES, Plant Engineer.



to facilitate flow of materials to warehouse and conversion units.

Only one-half of the new building is required to accommodate the new paper machine. The other portion will be used as a warehouse and there is still ample space for another machine which may be installed some time in the future.

Details of the new machine layout were not complete when the expansion program was announced. The mill production staff, headed by J. E. Maurer, vice president—who is executive in charge of the expansion committee—is working out the details, with the advice and cooperation of equipment suppliers.

Mr. Maurer, a Cal-Tech trained engineer and economics graduate, has as his committee: J. W. Genuit, vice president and sales manager; Richard S. Buckley, superintendent; Dr. Robert A. Baum, technical director, and Jack D. Rhodes, plant engineer.

The new No. 3 Black-Clawson machine will have the following auxiliary and complementary equipment: A new Dilts hydropulper, four Morden continuous treatment stock-makers from Morden Machines Co., Portland, Ore.; Bird screens, Valley Iron Works head box and inlet, Farrel-Birmingham nine-roll calender stack, and a Cameron Machine Co. winder with constant tension device.

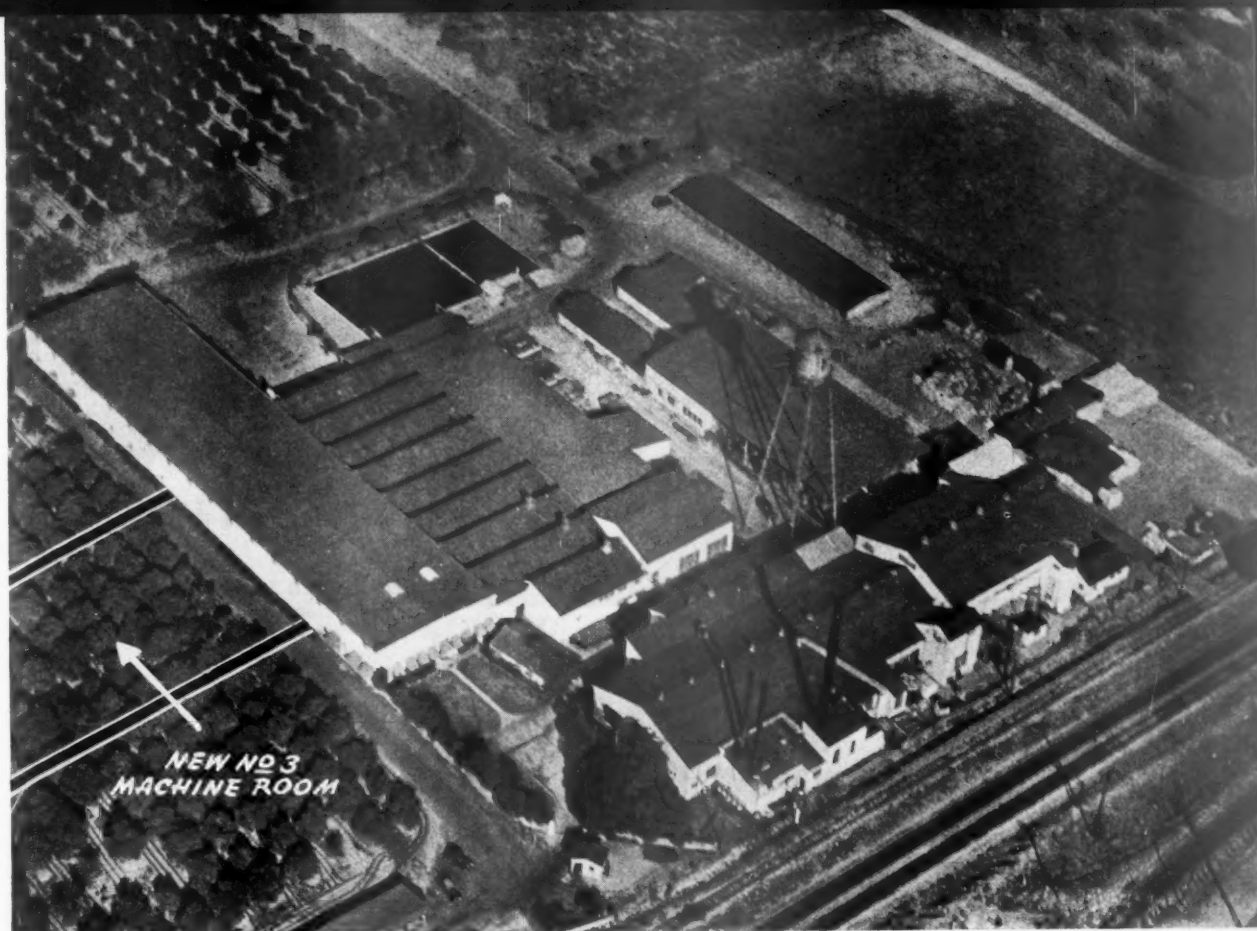
Wire width on the machine is to be 160 inches with trim 145 to 150 inches, according to grade. Speed of the machine will range between 600 to 1,200 f.p.m. Products to be manufactured include fruit wrapping tissue, waxing tissue, one-time carbonizing tissue and tissue specialties.

A three-year program of other equipment improvements and replacement was begun in Sept. 1944 and involved an expenditure of some \$300,000. This part is now almost complete.

This modernization program has reduced waste and fiber loss and will reduce maintenance and machine downtime.

Improvement in white water showers and piping for No. 1 and No. 2 machines and the installation of a Sven-Peterson Saveall on No. 2 have reduced use of fresh water from 1,400,000 gals. daily to about 900,000 gals. per day.

Installation of Morden Stock-Makers for the two present ma-



AIR VIEW OF FERNSTROM PAPER MILLS, Pomona, Calif. In the area marked to left of present mill buildings, now occupied by orange grove, will be new building for No. 3 machine ordered from Black-Clawson Co. for delivery in 1947. This building will connect with present warehouse.

each machine has two of these Mordens and one jordan, a truly continuous process treating arrangement for tissue. Operators at the mill say the flexibility, simplicity and power-saving of this process is evident. The installations save space and the Morden units seem to impart strength to the fiber without excessive cutting or shortening of the fiber.

Fernstrom was one of the pioneers in utilizing Mr. Morden's compact machines and they will have eight in all, including the battery of four for the new paper machine.

The new Dilts Hydrapulper will have sufficient capacity and circulation to do a good job of de-fibering and bring out maximum strength of the fiber.

Other improvements on No. 2 machine for citrus wrap—in head-box, table rolls, deflection boards and new monel suction boxes—have brought improved formation of sheet.

Slice rebuild, machine chest and regulator improvements, new individual drive motors instead of line shafts, and pneumatic press roll

loading are other improvements made on No. 2 machine, which is a 134-inch Fourdrinier.

On No. 1, a Yankee cylinder machine, 132 inches width, the improvements are new pumps and piping, grooved bottom couch roll, anti-friction bearings, felt rolls and steam turbine, drive and transmission equipment.

Improvements in the boiler plant, in laboratory equipment and in printing and converting departments also have been made.

Final resolutions authorizing Fernstrom's expansion were adopted at a board of directors meeting April 11. The board is composed of:

Erik Fernstrom, chairman; Fritz O. Fernstrom, president; Raymond E. Smith, Horace G. Miller and Walter H. Johnson, directors; Donald P. Nichols, secretary; Mr. Maurer, vice president and treasurer; and Mr. Genuit, vice president and sales manager.

Foresees Strong Demand

President Fernstrom stated his belief there will be a large market for paper in the future. De-

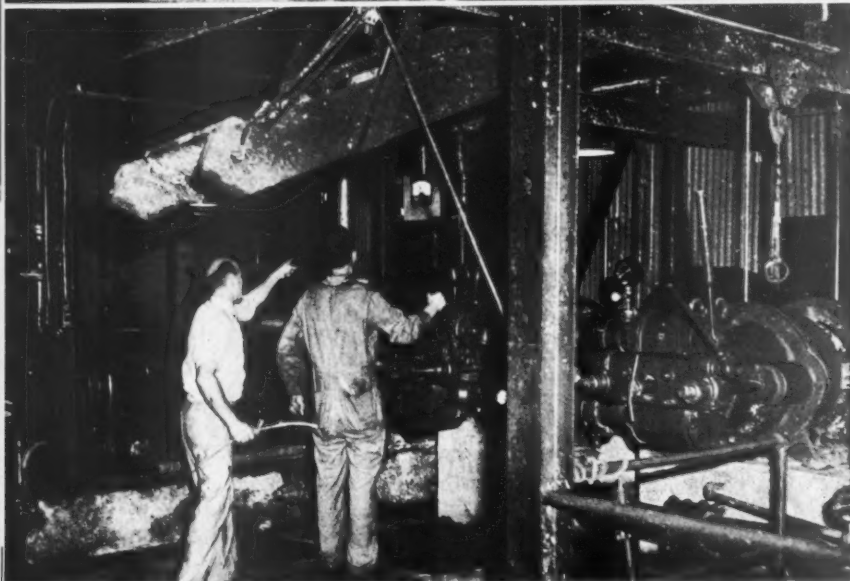
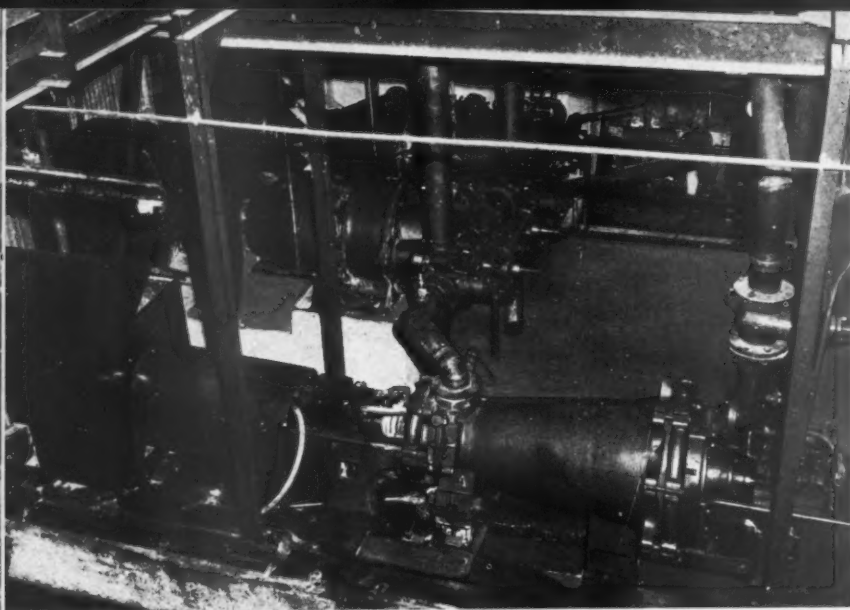
mands now are much greater than the mill's capacity, even though it operates seven days a week, and 24 hours daily.

The plant expansion will be financed through sale of preferred and common stock already arranged, and through long term bank loans, with Pomona and Los Angeles banks.

Fernstrom Paper Mills, established nearly 20 years ago, is one of Pomona's largest industrial plants. The company has an unbroken record of good employment relations. Sterling Pugsley is personnel manager.

At the present time almost 40% of Fernstrom employes are veterans of World War II and every effort is made, from the president down to encourage the veteran to feel he is a valuable part of the organization.

Fernstrom-produced tissues, thus far made on two machines, are widely distributed to wrap citrus fruits, tomatoes, apples, pears, eggplant, pineapples and papayas; loaves of bread and bottles of wine. The



paper is distributed in California, Oregon, Washington and Arizona; Mexico, Cuba, Puerto Rico and Brazil; Hawaii, Australia, New Zealand, Argentina, Trinidad, El Salvador, Jamaica and Panama.

The present plant occupies more than 10 acres and employs some 225 people. The water used in paper-making is used again to irrigate the lush surrounding orange groves.

Bill Webster Elected

William T. Webster, plant manager of the Brunswick Pulp and Paper Co. and former West Coast mill manager, has been named president of the Brunswick, Ga., Rotary Club for the coming year.

Mr. Webster has been a member of the club for about six years, during which time he has been very active in club affairs. He will take office for one year beginning July 1.

Photos here show combination of two Morden Stock-Makers and Jordan as installed for one of machines at Fernstrom Paper Mills, and giving that mill a truly continuous pulp treatment system for its tissue manufacture.

In lower photo, DICK BUCKLEY, recently promoted to Superintendent, is directing an engineer during installation of this equipment.

Cavins In Ski Contest

Harold Cavin, resident engineer with the Puget Sound Pulp & Timber Co., Bellingham, Wash., who was released last fall from Uncle Sam's Seabees, in which he was a commander, was in charge of the ski meet held by the Mount Baker Ski Club recently.

On the downhill run the Cavins came in third in doubles and Mrs. Cavin rated second in the downhill singles.

S. D. Warren Convention

S. D. Warren Co. has scheduled its sales convention at Rye, N. Y., May 8, 9, and 10.

NEW MILL IN FLORIDA

Allen enterprises will boost paper output from 150 to 400 tons per day. Black-Clawson machine ordered.

Plans for construction of a \$7,000,000, 200-ton-per-day paper mill on a site adjoining that of the existing plant of the Florida Pulp & Paper Co. at Cantonment, Fla., have been announced for the newly formed Alabama Pulp & Paper Company by James H. Allen, president of both companies. Cantonment is in Escambia county, 17 miles north of Pensacola, Fla., and is near the Alabama state line.

Productive capacity of Florida Pulp & Paper Co., now rated at 160 tons of pulp and 150 tons of paper, is to be built up to equal the new mill, affording a combined capacity of 400 tons of paper daily.

Associated with Mr. Allen in the new mill is the same group joined with him in the original company. These include A. D. Pace and J. C. Pace, executive vice presidents and respectively treasurer and secretary of the old company, who will serve as vice presidents and directors of the new one. Henry Hilton-Green will serve as a vice president and director of both companies. Robert H. Allen will serve as assistant to the president and a director in both companies. J. McHenry Jones, who saw service in the Pacific war theatre, will be a vice president and general counsel for the Alabama company.

At the first of the year, it was stated that Florida Pulp & Paper Co. owned outright 177,000 acres of excellent young pulpwood and uneven aged forest stand. It has been indicated that joint company holdings will approximate 500,000 acres, or enough to insure an adequate pulpwood supply source. Mr. Allen has long been noted for his interest in reforestation and his advocacy of the policy of a mill's hedging its investment by forest ownership.

Expansion of the village at Cantonment will be effected to accommodate the added employees at the new mill. The land is already owned by the company.

The site of the new mill is across the road from the old one in the

nearby area shown in the picture on this page of the Florida Pulp & Paper Co. mill. A machine for the new mill is being built by Black-Clawson Co. and will approximate a speed of 2,000 f.p.m.

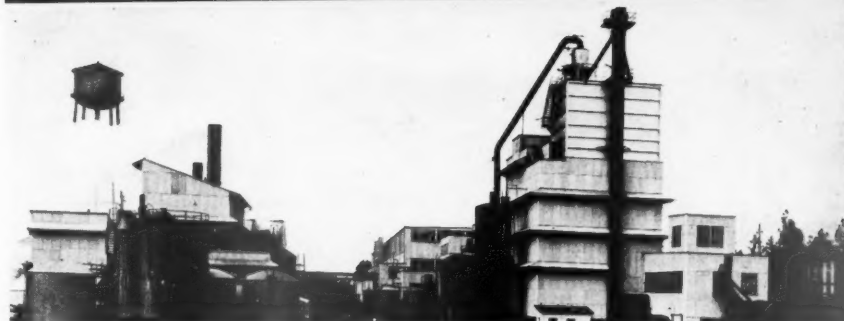
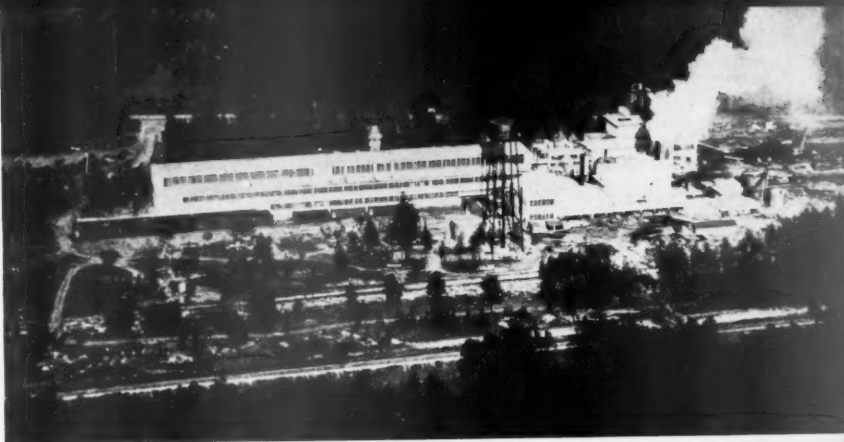
Engineering work for the new mill has been completed, with Hardy S. Ferguson and L. Morris Mitchell, of New York, serving as consultants in making of plans under the direction of Russell G. Seip, the Florida company's chief engineer. The general contractor for construction work is Merritt, Chapman & Scott of New York.

Allen Is South's Pioneer

James H. Allen has been an outstanding figure in the development of the southern pulp and paper industry.

He entered the pulp and paper industry through participation in building a mill at Bastrop, La., now the unit where experimental production is worked out by its current owners, the Southern Kraft Division of International Paper Co. Mr. Allen later took part in construction of other Southern Kraft Division mills, and subsequently left IP to participate in establishment of the Union Bag and Paper Corp.'s large integrated mill at Savannah.

Five years ago Mr. Allen achieved one of his ambitions, the establishment of his own pulp and paper mill, which began production at Cantonment on August 20, 1941. At this mill, which has a Black-Clawson paper machine, one of the most recently new ones installed anywhere, a world speed record was set for initial production.



Aerial view of Florida Pulp & Paper Co. at Cantonment (near Pensacola), Fla., and (below) a closer view of the operations.

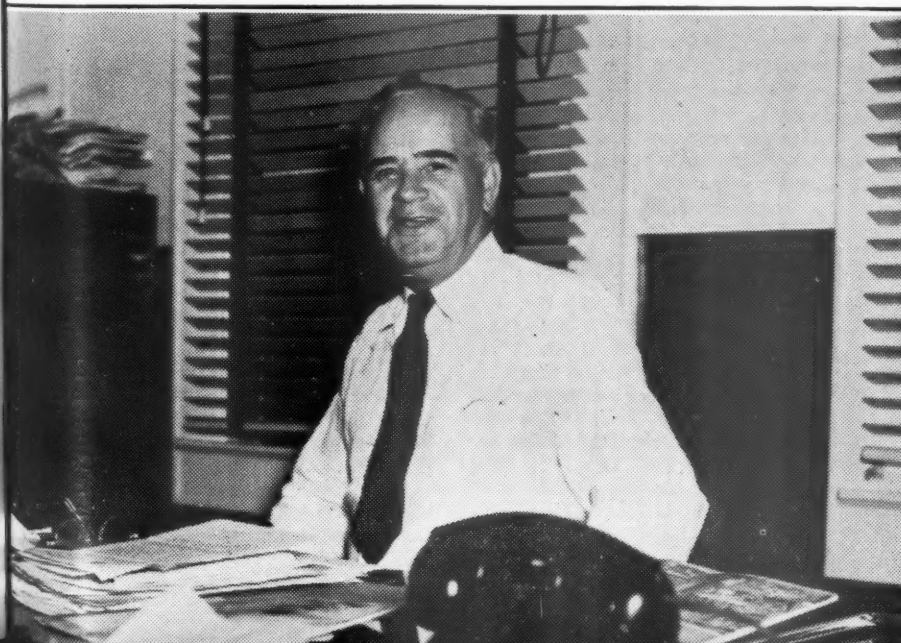
During the war years, the "Florida" company's executives for a \$1.00 fee to the corporation and as the Santa Rosa Pulp & Paper Co. brought to Cantonment from New Iberia, La., the machine originally set up to make paperboard from rice straw and by other ingenuities secured other equipment to integrate with the mill to provide at a cost of \$1,202,300 to Defense Plant Corporation a source of vitally needed ammunition and food con-

tainer board. The Santa Rosa equipment is now under lease (with purchase option) to the "Florida" company for production of high grade board for milk and frozen food containers.

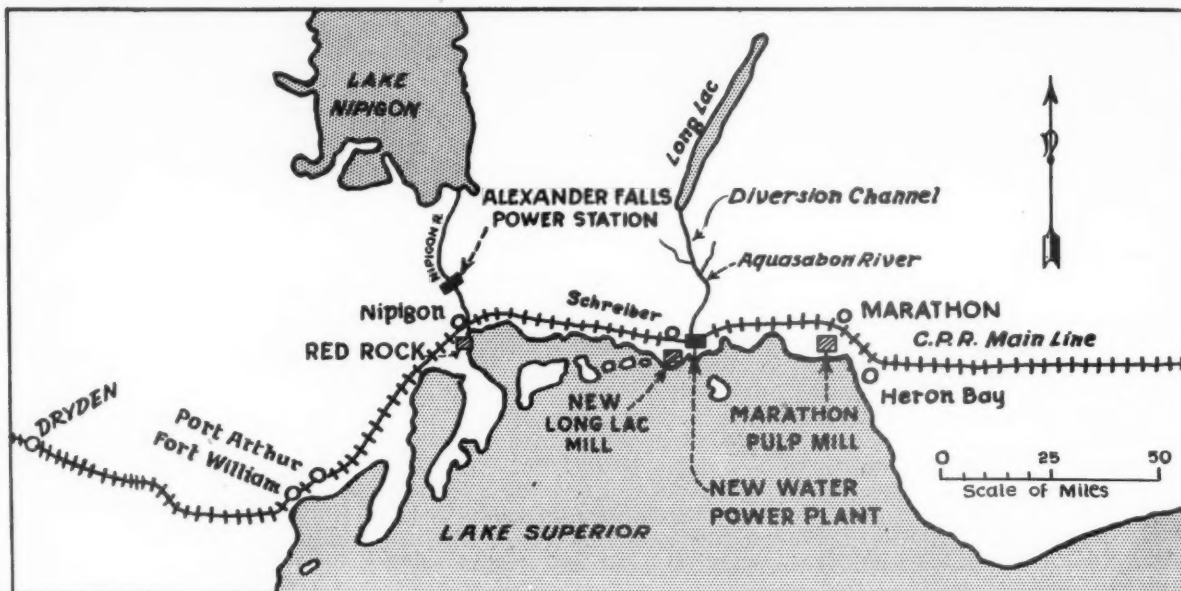
Among improvements being effected currently is the construction of a one-story steel frame finishing and washing room.

A factor in selection of the site which will serve both Florida Pulp and Paper Co. and subsequently the Alabama Pulp and Paper Co. was a ground water survey made by the City of Pensacola.

23



JAMES H. ALLEN, President of the newly formed Alabama Pulp & Paper Co. He continues as President of Florida Pulp & Paper Co., also. Mr. Allen is one of the real pioneers of the Southern U. S. industry, having directed the building of a number of now thriving plants.



THIS MAP SHOWS a section of northern Ontario along the shore of Lake Superior where much of Canada's current pulp and paper mill expansion is concentrated. At left is site of Dryden Paper Co., which is expanding production. At Red Rock, Brompton Pulp & Paper Co. has brought its new kraft mill into production. Kimberly-Clark Corp. is proceeding with a \$15,000,000 sulfate pulp development by

a subsidiary, Long Lac Pulp & Paper Co., location of whose mill and power development near Schreiber, is shown. Further east, at Marathon, the big new sulfate pulp mill being built by Marathon Paper Mills of Canada is rapidly nearing completion. Fort William and Port Arthur, also shown, have been important centers of the industry for many years.

NEW EQUIPMENT OPERATING AT DRYDEN PULP & PAPER CO.

LLOYD A. BRUCE, General Manager and Treasurer of expanding Dryden Paper Co., Ltd., Dryden, Ontario.



A Western Ontario pulp and paper enterprise that has developed a progressive tradition and has become an important factor in the production of kraft pulp and kraft wrapping is the Dryden Paper Co., Ltd., whose mill is located at Dryden, halfway between Winnipeg and Fort William.

Established in 1912 with an initial production of 40 tons daily, Dryden Paper Co. now produces 120 tons per day and improvements are now under way designed to increase tonnage considerably.

Using 100 percent jackpine, the company produces high grade pulp, sheathings, manila, bag paper and kraft wrappings.

President of the company, with head office in Montreal, is F. A. Sabbaton. Other executives are: J. S. Wilson, vice president; Lloyd A. Bruce, general manager and treasurer; G. L. Bennett, sales manager; J. B. Davison, secretary; D. H. Maunsell, production superintendent; E. G. Macdonald, chief engineer; C. Olsen, pulp mill superintendent; N. McMillan, woods superintendent; T. Cullen, finishing room superintendent; F. E. Ray, purchasing agent; N. I. Howe, assistant pulp mill superintendent; F.

Whiteley, maintenance superintendent.

Directors are Mr. Sabbaton, Mr. Wilson, J. R. S. McLernon, Geo. Chahoon, Don McLachlin, P. A. Thompson and E. R. Parkins.

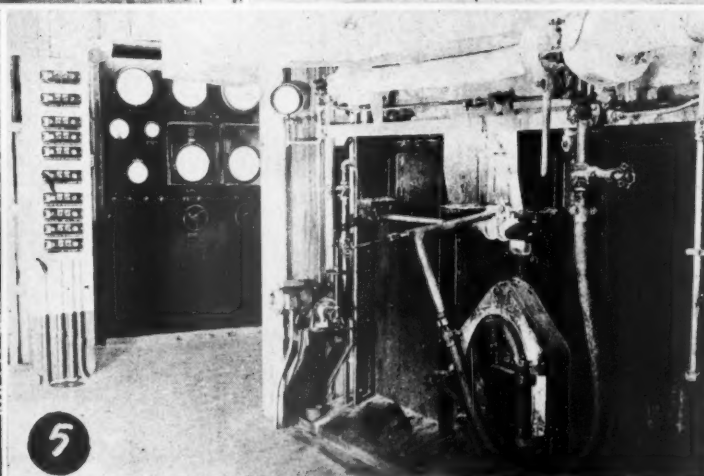
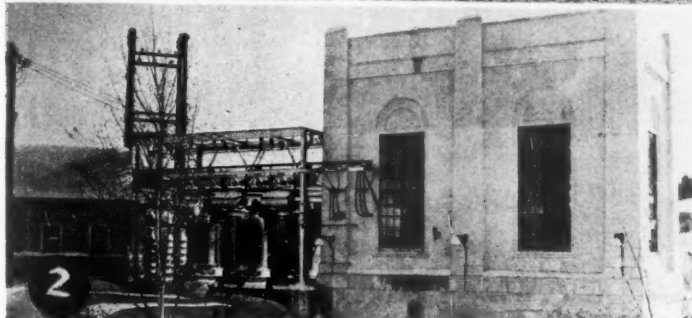
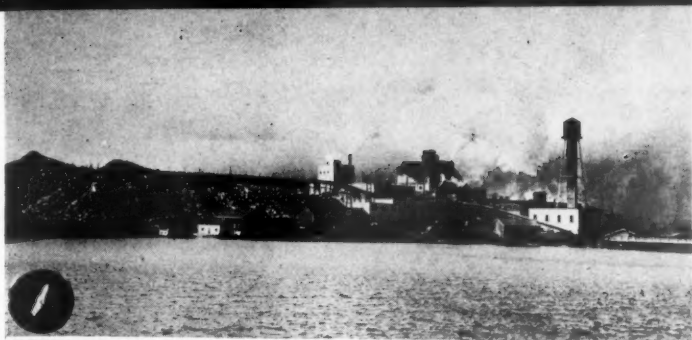
The company's timber limits are ample to cover future requirements of the mill. The company controls a licensed area of 750,000 acres, and annually purchases some 20,000 to 30,000 cords.

Situated on the Wabigoon River, most of the pulpwood is brought to the mill's slashers by water. Two new Fibre Making Processes, Inc., barkers supplied by Horton Steel Works (Canadian affiliate of Chicago Bridge & Iron Co.) have been installed to bark all wood before going to the block storage pile.

In the woodroom, there are two barkers, one Watrous and one Fibre Making Processes; and a Watrous chipper, screens and re-chipper.

New Digester Building

A complete new digester building has been in operation in recent months. The digesters, of 2100 cubic feet capacity, were supplied and erected by Dominion Bridge Co. Heat exchangers were supplied by Foster Wheeler Co. An overhead chip storage bin with a capacity of



VIEWS OF NEW INSTALLATIONS and other scenes at DRYDEN PAPER CO.:

1. Panorama of mill on Wabigoon River.
2. One of four power houses.
3. Wood operations.
4. New Recovery Building. Combustion Engineering unit is installed along with new Swenson evaporators.
5. Operation floor of Combustion recovery unit.

eight pots of chips was also included in the new building.

Pulp washing equipment consists entirely of diffusers. Six new diffusers 14 feet in diameter are being installed this year to take care of increasing production. The diffusers are supplied by Dominion Bridge Co.

Recovery Equipment

Spent liquor from the diffusers is sent to the new recovery room, which consists of a normal 100-ton recovery unit supplied and erected by Combustion Engineering Corp., Ltd., Montreal, and Swenson evaporators, supplied by Canadian Whit-

ing Corp., Toronto. The building was erected by the Manitoba Bridge Co.

A new six-body quintuple-effect Swenson evaporator, built by Toronto Iron Works, has forced circulation in the first effect and delivers liquor of 55% solids to the cascade evaporators.

The recovery unit, generating 50,000 pounds of steam per hour, takes care of the steam requirements for the pulp mill. A blow-down condenser, to be supplied by Whiting Corp., will be installed this summer and will provide ample hot water for the diffusers, making the

pulp mill more than self-sustaining as to steam requirements.

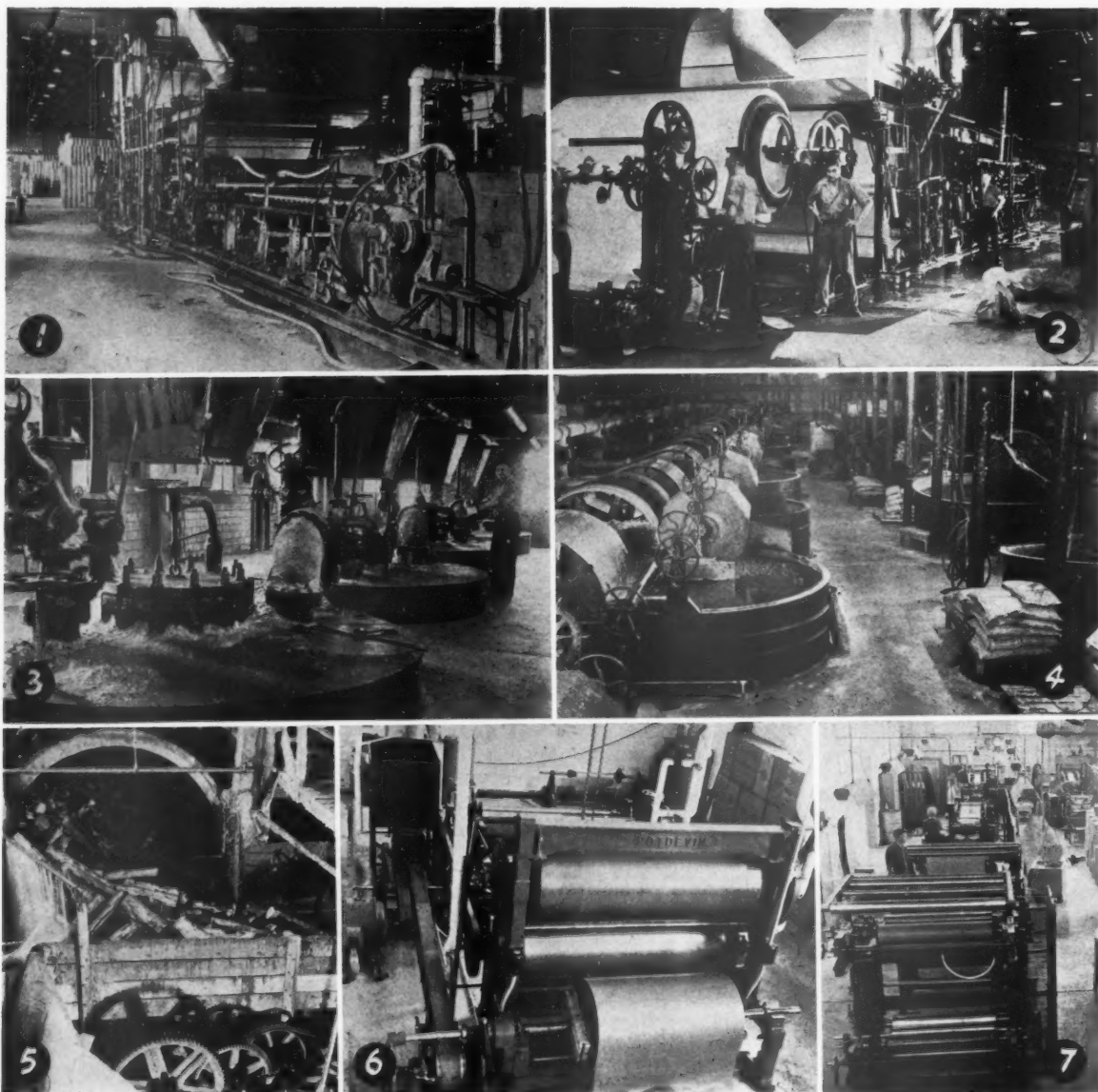
Sullivan and Ingersoll Rand air compressors supply air throughout the plant.

Causticizing is done by the batch process. Two new causticizing tanks supplied by Manitoba Bridge Co. are now in operation and two more will subsequently be installed.

The boiler room consists of one Combustion unit producing 30,000 pounds of steam per hour, one Heine and one Leonard boiler generating 44,000 pounds per hour. All are equipped with Detroit roto-stokers.

Paper Mill Improvements

Screened stock in the paper



MORE VIEWS of Dryden equipment, including new installations:

1. and 2. Views at both ends of Yankee 132-inch machine.
3. Operating floor of new digester building (digesters of 2100 cu. ft. capacity, from Dominion Engineering; heat exchangers from Foster Wheeler Co.).
4. Beater Room floor. E. D. Jones and Waterous beaters refine stock.
5. Barkers. 6. New Potdevin waxing machine. 7. New bag machine.

mill is thickened on one Oliver and one Sherbrooke filter. Stock chests are equipped with Shartles Agiflow pumps, supplied by Waterous, Ltd. Four chests are being fitted with agitators supplied by William Kennedy & Sons, Owen Sound.

Refining of stock for the paper machines is done in a battery of E. D. Jones and Waterous beaters.

There are two paper machines in the mill, one M. F. 110-inch machine having a trim of 96 inches and one 132-inch Yankee with a trim of

120 inches. Both machines are equipped with Bird screens.

A two-cylinder 140-inch machine of 128 inches trim produces rolled pulp for export and several grades of sheathing papers.

The cylinder machine and M. F. machine are being equipped with new hoods and economizers supplied by the Ross Engineering Corp., Montreal. This Fourdrinier machine will also be equipped with Grewin air-drying process, also supplied by the Ross Engineering Corp.

Both paper machines are equipped with automatic temperature controllers producing paper of uniform moisture content.

New Finishing Equipment

An increasing tonnage from the paper machine is being converted in the company's bag plant, where all sizes of grocery bags are produced. A new shopping bag machine equipped with printing press is now in operation, and a new waxing machine will produce waxed



SOME OF TOP EXECUTIVES AT DRYDEN (left to right): G. L. BENNETT, Sales Mgr.; J. B. DAVISON, Secretary; D. H. MAUNSELL, Production Supt.; C. OLSEN, Pulp Mill Supt.; and E. G. MACDONALD, Chief Engineer.



HERE ARE MORE KEY MEN OF DRYDEN (left to right): N. McMILLAN, Woods Supt.; T. CULLEN, Finishing Room Supt.; F. E. RAY, Purchasing Agent; N. T. HOWE, Asst. Pulp Mill Supt., and FRANK WHITELEY, Maintenance Supt.

papers to meet a steadily increasing demand. All equipment throughout this part of the plant was supplied by Potdevin, New York. Several additional bag machines will be installed this year, together with a twine machine to supply shopping bag handles, etc.

The St. Regis Paper Co. has a multi-wall bag plant adjacent to the Dryden Paper Co., which absorbs a large percentage of the tonnage from the M. F. machine.

Power requirements of the mill are met by the company's own hydro-electric plants supplemented by the Ontario Hydro Commission's plant at Ear Falls.

Dryden Paper Co. represents practically the only manufacturing industry in a community of 5,000 people, most of them engaged in farming.

Scholarship Offered

The Canadian Pulp & Paper Assn., through its British Columbia division, has presented to the University of British Columbia a \$1000 annual scholarship to be awarded to a graduate fellowship in forestry at the university.

The presentation was made to Dr. J. E. Liersch, head of the forestry department, by J. A. Young, vice-president of Pacific Mills, Ltd., in behalf of the association.

The scholarship will be eligible to graduates of any approved university who take their post-graduate course at the British Columbia institution.

Costs of Wood High in East, Too

Effect of wartime controls on operations of some Canadian pulp and paper companies is demonstrated in the annual report of Dryden Paper Co., operating in Ontario, for the fiscal year ended September 30, 1945, just issued. Net earnings are shown to be down at the equivalent of only 13 cents a share on outstanding capital stock, from 57 cents a share for the preceding year.

President F. A. Sabbaton states: "It should be borne in mind that, whereas the company is required to sell its output of papers in Canada at fixed ceiling prices and that these products are definitely allocated to particular consumers, both the labor and the materials necessary to produce have steadily advanced in cost.

"As an instance of this it might be noted that the pulpwood consumed by the mills in this fiscal year has cost the company \$50,000 more than a similar amount of wood cost in the previous year, notwithstanding the 27% increase reported in the 1944 statement, and many of the labor and material items over which there are no effective controls have risen in a proportionate scale."

Extends Bleaching

Work is progressing on an extension of the Gatineau mill of Canadian International Paper Co. in the form of facilities for bleaching sulfite pulp.

On completion the mill can produce either dissolving pulp or bleached paper pulp, as market conditions require.

Prince Rupert Mill Talk

Two eastern companies are reported to be negotiating for possible establishment of a pulp mill at Prince Rupert, British Columbia, and the Prince Rupert Industrial Development Committee has been asked to furnish data as to sites available, power available and extent of adjacent pulpwood resources.

Prince Rupert has often been discussed as a possible site for a pulp mill, and before the war Frank L. Buckley of Vancouver organized a company, financed largely by San Francisco capital, for the establishment of a sulfite mill there.

Canadian Association Work Is Merged

Canadian Pulp and Paper Association is now the single representative body of Canadian pulp and paper producers in matters concerning the industry as a whole, although Newsprint Association of Canada continues to represent the industry in matters pertaining specially to newsprint. The joint executive board of the two associations has been dissolved and its general functions have been transferred to the executive board of the CPPA, to which newsprint representation has been added.

Charles Vining, formerly president of Newsprint Association of Canada, has relinquished this position to become chairman of the association's executive committee. He has been succeeded as president by Robert M. Fowler, who is also president of CPPA.

OREGON STATE COLLEGE SELECTED FOR NEW WASTE LIQUOR STUDIES

The April 17 meeting at Portland, Ore., of the Pacific Coast Regional Committee of the National Council for Stream Improvement served to give cohesion to projects carried on by that organization on a nationwide front, and to unify the overall national picture of the 1946 program.

The West Coast gathering represented a middle link in tying up all problems of the national industry under direction of the council which represents 80% of the pulp, paper and paperboard production of the United States and over 90% of the nation's sulfite pulp production.

This schedule began with a New England regional meeting in January, another covering the Southern region in March in Edgewater Park, Mississippi. Following the Oregon meeting, the Middle Atlantic region was to convene at the Biltmore Hotel, New York City, May 22; a joint session for the Central and Lake States regions will follow at the Drake Hotel, Chicago, Ill., on June 5; and the South Central region is scheduled to close the regional meetings later that month.

The Portland, Ore., meeting finalized and authorized studies of high protein livestock feed production through utilization of wood sugars to create a by-product of wood pulping. A national demand for large quantities of vitally needed high-protein yeast for supplementing cattle, poultry, and other livestock, indicated that a substantial reduction in the pollutional characteristics of sulfite mill effluents, which are currently considered a source of stream pollution, may prove economically feasible, providing the farmers are able to pay a reasonable price.

The thinking back of this move received recent impetus from a report on installations which operated in Germany during the war for producing yeast for human consumption, as well as for stock feeding purposes (published in Jan., 1946, *PULP & PAPER INDUSTRY*). These examinations and findings coupled with other preliminary experiments and information gathered in this country, indicate that improvements far beyond German-achieved results are possible through newly-formed techniques.

Oregon State College, Corvallis, Ore., was designated by the Pacific

Coast Regional Committee as the research agency in connection with the yeast production problem, under sponsorship of the National Council.

The project will have its own staff but also will enlist support from the agricultural department of the Corvallis institution to determine possibilities of the program for relief of current livestock high-protein shortages, particularly in the Pacific Northwest.

Naturally, with such an institutional coordination of the project, an intensified market study will be conducted to determine extent of national markets, as well as pilot plant design and construction procedures for yeast production and experimental livestock feeding.

Kraft Waste Studies

Concurrently, studies at Oregon State College will determine effects of dilute kraft pulp mill effluents on fish and aquatic life in Northwest waters, as part of a co-ordinated program sponsored by the National Council in Wisconsin and Louisiana.

Investigations of similar character have for several years been conducted by the Institute of Paper Chemistry, Appleton, Wis., and research here is expected to merely tend to prove preliminary findings indicating that kraft wastes in Northwest waters are not sufficiently concentrated to constitute a menace to fish and aquatic life. Principal purpose, therefore, will be to establish basic data to serve as a guide to prevent serious pollutional problems in the future should the kraft industry develop to such a point in this section.

This work, listed to be directed by Professor Dimmick, Oregon State College, probably will be completed rapidly because of the extensive findings of Dr. Van Horn, relative to toxicity, which will be communicated fully to the new investigating group. Dr. Harry Gehm, technical advisor of the National Council invited biologists to meet with Prof. R. E. Dimmick at Oregon State College at a yet undetermined date in August when Dr. Van Horn will come out from Wisconsin to participate.

Dr. Harry Gehm, technical advisor, National Council, New York City, in a rapid summary of work done over the nation reviewed the

several projects which were described in detail in the *PULP & PAPER INDUSTRY* North American Review Number for 1946, just published and in the April issue of *PULP & PAPER INDUSTRY* (page 19).

Russell L. Winget, executive secretary, National Council, New York City, drew attention to the great number of persons of national reputation mentioned by Dr. Gehm, and said "never before has such a wealth of technical experience been brought to bear on such problems in any industry."

R. S. Wertheimer, chairman of the Pacific Coast committee and vice president and manager of Longview Fibre Co., stated that work would be started at once at Oregon State College, and asserted two or three research men would be added to the staff of chemical engineering to carry the yeast project through laboratory to pilot plant stages.

Members of state government regulatory agencies, called on for comment, all expressed commendation and a desire to cooperate fully.

Director Jack Taylor of the Washington Pollution Control Commission, said Washington cities are rapidly submitting plans to control city domestic waste.

C. M. Everts, Jr., head of the Oregon State Sanitary Authority, stated that Oregon municipalities, working on sewage disposal plans since 1940, are nearly all in a position to vote bonds now, but said all industries including those outside the pulp and paper field, were not active in the work.

Following a statement by Dr. Nathan Fastin, Washington Pollution Control Commission, to the effect he hoped a solution would be speedily found so that pulp mills and fisheries may both survive, pulp and paper industry representatives closed the meeting with statements.

F. N. Youngman, vice president of Crown Zellerbach Corp., pointed out that all cities know the answer to the sewage disposal problem lies now in authorizing sufficient money to build plants for the purpose, but in the pulp and paper industry, "frankly we do not have the answer." He said research programs show that mills cannot control waste by simply spending money.

Pulp and paper industry representatives present are in the pictures on the next page.

At Portland meeting:
Standing (left to right):
E. N. Wennberg and
Theodore Osmund, Col.
River Paper Mills - Ore.
Pulp & Paper Co.; M. E.
Sanford, Fibreboard
Products, Inc.; E. A.
Weber, Ore. Pulp & Pa-
per Co.; J. H. Hull,
Crown Zellerbach Corp.
Seated (l. to r.): Lawson
Turcotte, Puget Sound
Pulp & Timber Co.; F. N.
Youngman, Crown Z
Corp.; R. S. Hatch and
R. B. Wolf, Weyerhaeuser
Timber Co.



PICTURES ON THIS PAGE SHOW REPRESENTATIVES of companies which are members of Pacific Coast Regional Committee for National Council for Stream Improvement and also representatives from the New York headquarters of the Council. Left to right above are: Front row: Russell L. Winget, Executive Secretary, National Council; R. S. Wertheimer, Longview Fibre Co., Chairman of Coast Committee; Erik Ekholm, Puget Sound Pulp & Timber Co., and Vice Chairman of Committee; Dr. Harry Gehm, Technical Advisor, National Council. Back row: Dr. John Hart, Longview Fibre Co.; M. W. Black, Inland Empire Paper Co.; N. W. Coster, Soundview Pulp Co.; Gordon Sherwood, Hawley Pulp & Paper Co., and William R. Barber, Crown Zellerbach Corp.



Also at Portland:
Standing: Max Oberdorfer Jr. (left) and Irving T. Rau, St. Helens Pulp & Paper Co. Seated (left to right): Ralph Reid and O. M. Allison, Spaulding Pulp & Paper Co.; Lyall Tracy and Dr. R. E. Brown, Rayonier Inc.; John L. Farley, Crown Z Corp.

From Gearhart, Ore., to Poland Springs, Me., Convention Season Is On—We Said ON, Son!

As this issue went on the press, eyes of the industry were pretty much centered on Gearhart, Ore., colorful little fishing village and sports resort on the shores of the Pacific, where the Coast TAPPI and Superintendents were holding their annual joint conclave. A number of top national leaders were participating, which gave the meeting wide interest.

A few weeks hence and attention will shift across the continent to Poland Springs, Me., for the big Superintendents' National Convention.

Mr. and Mrs. Raymond L. Barton—he's prexy for a second term of the Superintendents—are making both of these affairs. They started out from the little town of Plainwell, Mich., in the "Near East" or "Mid-West" (depending on your point of view). Incidentally, Mr. Barton, who is superintendent of Michigan Paper Co., is getting around to a lot of conventions of his organization, despite travel handicaps, in order to help stimulate its activities.

Other travelers for the cause of the TAPPI, Gunnar Nicholson, vice president of Union Bag and new national president of that group, and R. G. Macdonald, national secretary-treasurer, were likewise checking in at Gearhart. The former had the assignment of presenting the coveted Shibley award for the best paper of the year by a young mill operations employee on the Pacific Coast.

Papermaking, kraft pulping and sulfite pulping panels were already lined up for three live-wire round table discussions to climax the technical sessions at Gearhart. An informal dance and a formal ball—on the successive Friday and Saturday nights—and two different golf tournaments—one for ladies on Friday and one for men on Saturday—made this Joint Meeting at Gearhart the first one since Pearl Harbor to have the oldtime flavor of fun and frolic.

There will be more of the same at Poland Springs and the national superintendents' affair. No sooner hardly than the Gearhart show ends, the man chiefly responsible for it, Charles Ackley, of Crown Z mill at Lebanon, Ore., who was both convention chairman and superintendents' chairman, was heading east for Poland Springs.



A PAIR OF MICHIGANDERS who are going to figure prominently in the Superintendents' National Convention at Poland Springs, Maine, June 17 to 20.

RAYMOND L. BARTON (left), President, will be the presiding officer. He is Superintendent at Michigan Paper Co. of Plainwell. He has been a persistent "conventioneer" in the past two years, helping build up his group. Here he is snapped with a convention tag on his lapel.

ALLAN B. MILHAM (right), President of Bryant Paper Co., Kalamazoo, now an important unit of Time, Inc., is going to be Toastmaster at the National Banquet at Poland Springs.

Poland Springs Program

The entire program of June 19 at the Poland Springs convention, will be given over to a forum titled "Preview of Things to Come" and equipment and supply firms will be given an opportunity to present their products and ideas.

The forum will be divided into five parts: *Woods Operations, Pulp- ing, Stock Preparation, Paper Machines, and Engineering*. Talks will be limited to five minutes each, followed by discussions.

Firms interested in presenting their ideas at the forum are requested to notify the convention secretary, George W. Craigie, 220 East 42nd St., New York 17, at the earliest possible date.

The round table discussion on bleaching of all kinds of pulps promises to be a lively feature of this convention. T. W. Toovey, of Pennsylvania Salt Manufacturing Co., Dr. J. D. Rue of Hooker Electrochemical Co., and Dr. J. S. Reichert of E. I. DuPont de Nemours will be leading experts participating in this forum.

Another "trend - of - the - times" forum will be on new methods of continuous stock preparation as against batch practice, with R. M. Wishart, Oxford superintendent, as the moderator. C. W. Morden, of Morden Machines Co., Douglas G. Sutherland, vice president of Suth-

erland Refiner Corp., and R. F. Vokes of Dilts Machine Works, will participate.

Al Perlick, of Kalamazoo Vegetable Parchment Co., is chairman of the golf committee and believes that end of the festivities will make up for war time inactivity.

With the good weather, a lot of meetings were held this month—the Northwestern superintendents at Green Bay, Wis., on May 18, and the Penn-Del.-N. J. group at Atlantic City on May 10-11. And next Sept. 13-14, the Northeastern superintendents will meet at Bretton Woods, N. H.

Canadian Meeting Is Set For Port Arthur June 6-8

The Technical Association of the Canadian Pulp & Paper Association meanwhile, is going to have its big spring meeting at Port Arthur, Ontario, on June 6-7-8.

These arrangements were learned in connection with plans of Halvar Lundberg, Pacific Coast chemical engineer, to prepare a summary of his book-length article "Acid Making in the Sulfite Pulp Industry" for presentation at Port Arthur on one of those dates. This is the article which Mr. Lundberg—who has been called "the SO₂ Man" of the industry—wrote for this magazine and which was published in installments in most issues from Jan. 1943 to Aug. 1945.

Mr. Lundberg said he himself would not be able to go to Port Arthur but his summary of the PULP & PAPER INDUSTRY articles would be presented by G. F. Allo, control superintendent, Bathurst Power & Paper Co., Ltd., of Bathurst, New Brunswick.

Socony Man Talks At Chicago Paper Meeting

Dr. C. J. Dean, manager of Socony Vacuum Co.'s lubricating department process products section, prepared a talk on "Petroleum Products for the Paper Industry" for the May 20 meeting of the Chicago Professional Paper Group.

This group meets every third Monday except in summer at the Chicago Bar Assn., South La Salle St.

Rent-Free Gardens For Nepco Employees

Nekoosa-Edwards Paper Co. again prepared 50 x 100 ft. rent-free garden plots for employees this year. The company has the ground plowed, disced, harrowed and fertilized. Last year 85 employees of Nekoosa and Port Edwards, Wis., mills took advantage of the offer.

Pulp, Rubber and Starch Discussed At Round of Middle West Meetings

Anyone making a round of the industry meetings in the Middle West in April would have been treated to a varied education in matters of importance to the pulp and paper industry in all regions of the continent.

Such a tour made by PULP & PAPER INDUSTRY's Midwest representative brought information on these subjects:

At Appleton, Wis.—Some results of experiments in pulping Douglas fir and aspen and bleaching hardwoods.

At Kalamazoo, Mich. — Future outlook for synthetic and natural rubber.

At Chicago — The gloomy and still-darkening picture, for starches.

Lake States TAPPI

Results of recent research at the U. S. Forest Products Laboratory, Madison, Wis., were presented to the Lake States Section of TAPPI at Appleton.

Sidney L. Schwartz, from the laboratory, described experiments with continuous liquor flow in sulfate pulping, accomplishing a reduction of 5/8-inch Douglas fir and aspen chips to usable pulp in 35 to 50 minutes.

With a concentration of 90 grams per liter and a maximum temperature of 170° C., Douglas fir kraft pulp was produced in a cooking period of 35 minutes and bleachable sulfate pulp in 50 minutes. With a concentration of 45 grams per liter and the same temperature a 50% yield of easy-bleaching sulfate pulp with an 88.6% alpha cellulose content was obtained in 35 minutes. The speaker predicted that the cooking time could be further reduced if temperature and concentrations were increased.

In the process, pre-heated cooking liquors were allowed to flow continuously through a digester charge during the cooking period. Maximum digestion temperature was attained in less than 20 minutes. The concentration of chemicals in the cooking liquor remained practically constant throughout. The large volume of liquor passing through the chips causes rapid removal of the soluble lignin reaction products and pulp discoloring substances from the sphere of reaction. This method results in lighter-colored unbleached pulps and

gives easier-bleaching characteristics.

F. A. Simmonds described experimental work in bleaching of semi-chemical pulp, produced from hardwoods by the neutral sulfite process. With this process an unbleached pulp with a brightness of 60% was raised to 70½% by the addition to treatment of 2% of sodium peroxide.

The Starch Situation

At the Chicago Professional Paper Group meeting on April 15 a panel on the topic "Weathering the Starch Crisis" was composed of J. V. Bauer, Stein-Hall & Co.; E. S. Gantt, Corn Products; L. J. Hayhurst, Hayhurst Research Laboratory; Dr. J. E. Killinger, Penick & Ford; Fred Sanders, National Starch Products; Don Thom, F. G. Findley Co., and E. W. Morton, American Bitumuls Co.

Main interest and discussion by panel members and from the floor centered around the various starch extenders and starch substitutes which have been developed and are being improved. Consensus was that most extenders are still costly, contain a lot of "bugs." Pro-

posed extenders and substitutes for corn starch included resins, flours made from rice, peanuts, potatoes, and microcrystalline waxes. Flour from wheat or rye after borating is too light for some machines, it was stated. Although a few enzymes have been developed which make possible storage over a period of months, big bug in flour starches is the age ability factor. Most must be used immediately or they are rendered useless.

Even the storage durability of corn starch is dubious because of the high moisture content of crops being utilized. Due to weather conditions, growers were forced to plant later on crops which have gone into starch now being used and much of this corn was second or third planting. Even 120-day corn has been used during the shortage. Weather factors have produced a corn the water content of which is twice that of normal corn. Although, according to panel experts, starch produced from this corn is equal in most properties to starch from corn of normal moisture content, processing is more difficult and involved.

The panel closed on a pessimistic note. The starch crisis will worsen in coming months instead of improving. There will be little available corn starch until the new crops are harvested early in 1947. Bugs and high costs notwithstanding substitutes and extenders must be utilized if production is to be maintained. Sodium silicate and animal glue users are in no better position than corn starch users; both are equally critical.

Michigan Superintendents

The April 18 meeting of the Michigan Superintendents Division heard A. C. Lutz of B. F. Goodrich Co. say: "If pre-war production can be used as a gauge, it may be said that reconversion of the rubber industry will soon be complete."

He compared the present capacity of the American synthetic rubber industry, in excess of one million tons yearly, with total rubber consumption of 650,000 tons during 1940. Although he reported that less than 10% of the rubber trees in the Far East were destroyed by the Japanese occupation, many difficulties still lie in the way of re-



Who's who has some folks confused these days in Far Western industry with two WALTER DeLONGS—unrelated to each other—in prominent positions with two big pulp producing companies.

One on left is Personnel Officer of Weyerhaeuser Timber Co., serving all its timber industries. One on right is Vice President and Manager of St. Regis Paper Co.'s Kraft Pulp Division. To make it even more confusing, both have headquarters in Tacoma, Wash.

When Weyerhaeuser's Walter J. DeLong (the other uses no initial in his signature) was Washington State Director of the Selective Service in recent war, with rank of Colonel of Infantry, he wrote an article especially for this magazine, clearing up many points then in doubt about essentiality of pulp and paper. He rated this industry "on an equal plane with basic war industries," and appealed to men with children to leave non-essential work and seek jobs in the mills.

NEW CHICAGO PAPER GROUP OFFICERS

New 1946-1947 officers of the Chicago Professional Paper Group named at April meeting:

President—F. D. Long, Container Corp. of America.
Vice President—Albert K. Roach, William Welsch Co.
Secretary—Warren Price, Applied Research Service.
Treasurer—Clifford Swett, National Wax Co.

sumed natural rubber production. Among these were listed the unsettled political conditions in certain of the rubber-producing areas, unavailability of necessary equipment for collecting and processing, of sufficient labor, of adequate transportation facilities.

The speaker estimated world production of natural rubber for 1946 will be under 600,000 tons, for 1947, 900,000 tons or less. Synthetic rubber thus must fill an estimated 900,000-ton gap in rubber production for 1946, a 600,000-ton gap for 1947 before estimated world consumption of 1,500,000 tons could be met by natural rubber output. Even after resumption of normal natural rubber production equal to world needs now being supplemented by the use of general purpose synthetic rubber, Mr. Lutz predicted that about 100,000 tons of special purpose synthetic rubber will be used annually by industry because of lower cost and because in certain applications its performance is superior to that of natural rubber.

Couch rolls made from oil-resisting synthetic were cited in support of this belief. The speaker admitted that for certain types of press rolls, natural rubber is still superior but looked to technical advances for equivalent quality in press rolls of synthetic rubber, pointing out that top press rolls of zero hardness have been produced and successfully tested.

The speaker also discussed fluctuations in the prices of natural and synthetic rubber. All-time high for natural rubber prevailed in 1910 when price reached \$3.12 a pound. All time low was New York price of 3c per pound in 1932. Current fixed price is 20½c per pound. General purpose synthetic rubber has dropped since V-J Day from a plant cost of 30c a pound to 12c and is priced at 18½c. However, American production of synthetic rubber is under government control and plant cost excludes plant amortization, depreciation, distribution costs and capital return. Under private enterprise production cost would rise to between 15 and 18 cents per pound.

ATTENDANCE AT APPLETON

Attending the April meeting of Lake States TAPPI were A. Adrian, Neenah



JOHN D. ZINK, who has been appointed by Hammermill Paper Co., Erie, Pa., to its organization. Mr. Zink, who recently resigned as president of Strathmore Paper Co., Springfield, Mass., has long been prominently identified with the rag-content paper industry and was formerly head of the Writing Paper Assn. and on executive committee of American Pulp & Paper Assn.

Donald S. Leslie, General Manager of Hammermill, said Mr. Zink will head up a new activity for production and merchandising of additional grades of fine papers. Mr. Zink had been with Strathmore since 1925.

Besides being past President of WPMA, he is on executive committee of National Council for Stream Improvement. He served on WPB Advisory Committees during war.

Paper Co.; Francis J. Allard and Carl Baerman, Hoberg Paper Mills Inc.; Rob Anderson, F. A. Birmingham, J. S. Barton, L. R. Ayers and John W. Apling, Institute of Paper Chemistry; Joseph E. Atkinson, John Strange Paper Co.; J. P. Bainbridge, Jr., Monsanto Chemical Co.; Arnold G. Beaman, Fox River Paper Co.; D. V. Bergman, PULP & PAPER INDUSTRY; W. A. Billings, Jr., Heller & Merz; Paul Boronow, Valley Iron Works; Mark W. Bray, U. S. Forest Products Laboratory; Martin Bretl, Resinous Products Co.; M. A. Buchanan, Institute of Paper Chemistry.

R. C. Crain, Nekoosa Edwards Paper Co.; H. C. Crandall and G. F. Enderlain, Mosinee Paper Mills; Ernest H. Const, retired; Lee Heroman, D. R. Cushman and L. A. Gilbertson, Marathon Corp.; Frank Dinarski, Northern Paper Mills; R. T. Elias, Whiting-Plover Paper Co.; William A. Fannon, The Fannon Trading Co.; C. R. Faulkender and John Francois, Hoberg Paper Mills, Inc.; Herbert F. Gardner, Stein Hall & Co.; F. S. Hanson, and E. M. Hauge, Kimberly-Clark Corp.;

Ed Heberlein, Socony Vacuum Oil Co., Inc.; George A. Hermann, Hermann Mfg. Co.; Loren Foreman, T. A. Howells, Lief Jorgensen, A. R. Kjeilzre, Chas. Linzelbach, Dr. Emil Heuser, Institute of Paper Chemistry; Ray N. Holland, Miles Meidam and Arthur F. Jankowski, Marathon Corp.; Ralph M. Kingsbury, Forest Products Laboratory; Joseph J. Kryszak, Wisconsin Tissue Mills; Alex Lanx, Fox River Paper Corp.; A. J. Luth, Fall Chemical Co.; N. L. Malcove, Northern Paper Mills; A. E. May, Thilmany Pulp and Paper Co.; R. W. Meyer, Badger Paper Mills, Inc.; L. A. Mogg, Whiting-Plover Paper Co.

Ralph E. Nelson, Monsanto Chemical Co.; James Nick and Freeman Petri, Hoberg Paper Mills; Don Niemeyer, Institute of Paper Chemistry; H. A. Norseen and S. W. Pollock, Valley Iron Works; D. C. Porter, Kimberly-Clark Corp.; T. R. Probst; W. B. Priskey and Dick Radsch, Appleton Machine Co.; F. T. Ratcliff, Institute of Paper Chemistry; Herb W. Rowe, L. D. Wellman and J. H. Smart, Nekoosa-Edwards Paper Co.; Milton Schmidt, Thilmany Pulp & Paper Co.; W. L. Shaw, Heller & Mertz; F. A. Simmonds and Sidney Schwartz, Forest Products Laboratory; P. G. Smith, Northern Paper Mills; L. E. Smith, Interlake Paper Co.; E. C. Swackhauser, Merchants Chemical Co.; M. J. Taylor, Wisconsin Tissue Mills; Walter C. Utischig and L. E. Simerl, Marathon Corp.; Martin Van De Laaischot and William Verhagen, Hoberg Paper Mills; E. H. Voigtman, J. A. Woodruff and J. A. Wollwage, Kimberly-Clark; H. L. Voss, Mosinee Paper Mills; A. P. Yunt, Robt. Stillings, John C. Tark and Sidney D. Wells, Institute of Paper Chemistry, and H. L. Wendshuh, Appleton Machine Co.

MICHIGAN ATTENDANCE

Attending the April Superintendents meeting in Kalamazoo were: E. H. Ames, Graton & Knight Co.; Ralph Atkins and C. D. Beebe, Lee Paper Co.; D. D. Bachelder, Sutherland Paper Co.; J. A. Dean, W. H. Astle and Raymond L. Barton, Michigan Paper Co.; D. V. Bergman, PULP & PAPER INDUSTRY; O. Callighan, Edgar Bros.; D. D. Cameron, Hercules Powder Co.; C. W. Cassell, Bryant Paper Co.; Glenn V. Cathay, A. W. Cole, Rex Paper Co.; William F. Costello, Joe E. Longhead Co.; George Culver, Allis Chalmers; Robert Davis, Joe E. Longhead Co.; Paul Dumas, Chromium Corp.

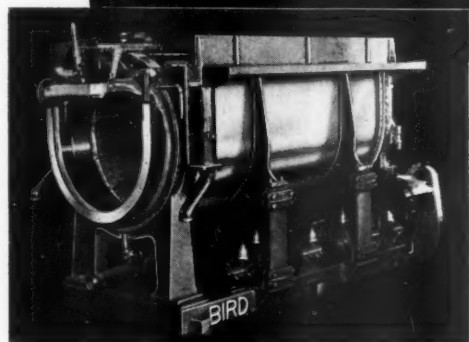
M. F. Floton, Allied Paper Mills; Marvin Gallagher, Bryant Paper Co.; E. C. Gardner, Lee Paper Co.; Al Perlick, W. F. Hathaway and L. H. La Liberte, Kalamazoo Vegetable Parchment Co.; H. B. Johnston and W. A. Kirkpatrick, Allied Paper Mills; D. K. Lambert, Falk Corp.

R. A. Lane, Arnold Weller and Glen Sutton, Sutherland Paper Co.; A. C. Lutz, B. F. Goodrich Co.; E. L. Morris, Graton & Knight Co.; Henry Neudorf, Rex Paper Co.; Everett Nicholas and W. F. Wolfe, MacSimBar Paper Co.; D. H. Parker, Dupont Co.; H. F. Roderick; Robert E. Short; C. B. Smith, Noble, Wood Co., and R. M. Sorlie, Joe E. Longhead Co.

Resume Baseball

After a wartime let-down in sports events, employees at the big newsprint mill of Crown Zellerbach Corp. at Port Angeles, Wash., are fielding a baseball team in the city league. Jack Ervin, a veteran baseball pitcher, is manager.

You Need

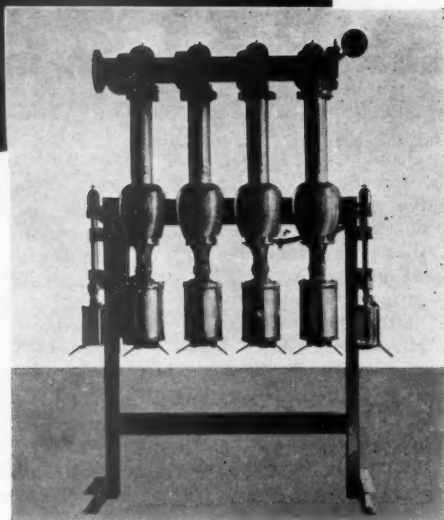


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to remove dirt by size. They get the larger-than-fibre dirt and shives just ahead of the wire and to comb out and individualize the fibres to assure continuously good formation at top machine speed.

The Bird Screen delivers a homogeneous mixture of stock and water free of lumps, strings and slime. It is the best insurance for sustained, high speed operation. That is why 85% of all the paper made in North America passes through Bird Screens.

The combination of Bird Screens and Bird Dirtecs is the best bet for clean paper. Ask us to show what they can do for you.



BIRD DIRTECS

to remove dirt by differences in specific gravity. Making use of the pressure-drop principle in a new and more effective way the Dirtec yanks the heavy and the light dirt out of the stock and whisks it out of the system smoothly and surely.

The Bird Dirtec is easy to install, operate and maintain. No moving parts. It is now operating with outstanding success on a wide variety of grades.

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Panorama of Soleduck (at left) showing scene of Fibreboard Products Inc.'s, first venture in logging. Here is the historic Camp One, about 32 miles west of Port Angeles, Wash., famous for its big log yield over many years. In foreground is good stand of second growth. Long logging train also is shown. A truck (at right) halts on flat spot in mountain road near Camp One. Petrus Pearson, Jr., veteran Superintendent of this operation, stands in front of truck, back to camera.

Fibreboard Products, Inc., Enters Logging Business To Assure Raw Material Supply for Its Mills

Another Pacific Coast timber area sale has been made, this one having the objective of stabilizing future pulp supply for five Fibreboard Products mills. The company has purchased all of the Crescent Logging Co.'s property on the Olympic Peninsula in the state of Washington. The purchase includes Crescent's logging camps, timber, logging equipment, Ediz hook booming grounds, and Camp One on the Soleduck River, where the cut has averaged 20 million bd. ft. (40,000 cords) a year.

The logging operations will continue with the present staff, according to R. E. Bundy, general operating manager, under N. M. Brisbois, vice president in charge of operations.

Logging operations will be carried on under the name of the Soleduck timber division, Fibreboard Products Inc., under the general management of Nelson Hartnagel, who has been assistant resident manager of the

Port Angeles Fibreboard plant since 1943. Verne Basom is manager.

The logs from Camp One will come to the Port Angeles booming grounds over the Port Angeles Western railroad, and pulp timber will be used at the Port Angeles plant, and other timber used as trading stock or sold on the open market.

The Port Angeles mill furnishes pulp for four other of the corporation's plants on the Coast.

Douglas Fir for Weyerhaeuser Mills

Weyerhaeuser Timber Co., Longview, Wash., mills is receiving Douglas fir logs taken from the company's new \$1,000,000 logging development in Clackamas County near Molalla, Ore. Logs from the development will be used for sulfite and sulfate pulp, lumber, plywood and new products developed in connection with the company's barking plants, according to the company. The sulfite mill is to be completed in 1946.

Although the operation is geared to produce 35 million feet of logs annually, it is not expected to turn out more than 10 million feet under the sustained yield system which will be set.

Weyerhaeuser Plans Expansion in Oregon

Weyerhaeuser Timber Co. has announced plans to construct a plywood mill at Longview, Wash., estimated to cost around \$1,000,000, a large sawmill near Springfield, Ore., and dock and sawmill on Coos Bay at North Bend, Ore.

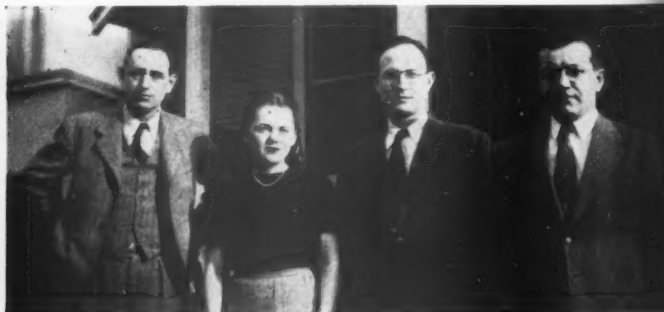
The plywood plant is the company's fourth major (new) development at Longview, the other being a sulfate pulp plant, conversion of the present sulfite plant from a lime base to a magnesium base process and a hydraulic whole log barking plant.

The plywood plant site selected is located east of the old shingle mill and the hydraulic log barker.

Pulp mills now are operated by the Weyerhaeuser company at two of its centers of operations in Washington state. At present, in Oregon, it has just one sawmill, at Klamath Falls.

Art Berggren Heads Northwest Door Co.

Arthur W. Berggren, former Washington, D. C., representative of Rayonier Incorporated and former manager of Rayonier's Port Angeles mill, has taken over as general manager of Northwest Door Co., Tacoma, Wash.



Upper left: view of logging bridge spanning Soleduck River near Camp One of logging properties bought by Fibreboard Products, Inc. Above: Office force of new Logging Division, standing in front of Plant Office of the Port Angeles mill, which is also their headquarters. Left to right: Nelson Hartnagel, Assistant Manager of Port Angeles mill and Manager of Logging Division; Carole Marler, stenographer; Ted Eichenberger, who came from San Francisco to set up Logging Division accounting system, and Leo McCloskey, accountant who recently returned from Army service as lieutenant.

Group at left (left to right): Mr. Hartnagel, this time in "logging" outfit; Petrus Pearson, Jr., Superintendent; and Harvard Stovel, Time-keeper.

PAPER . . . America's

6th Industry

PAPER BAGS FOR VACUUM CLEANERS

(NEWS ITEM: A paper filter bag for vacuum cleaners is helping to take the work out of housework.)

The newest of streamlined household appliances is a vacuum cleaner with a paper filter bag inside the regular vacuum bag. Attached to the exhaust end of the cleaner, the paper bag gathers all the dust for easy and clean disposal. Unlike ordinary vacuum cleaners which require cleaning after each use, this airtight bag can be used as long as six weeks without danger from germ-laden dust.

Paper packaged fuel . . . paper cartons for light bulbs . . . paper baking dishes . . . paper paint cans . . . New uses for paper calling for new standards of lightness and toughness, new standards of quality in performance. New responsibilities—new opportunities for the Pulp and Paper Industry.

The Puseyjones Organization is now devoting itself completely to the design and construction of Paper-Making Machinery built to new high standards of speed and efficiency, and to the modernization of existing machines.

Among the new machines under construction by Puseyjones are three of the largest and fastest Fourdrinier Machines, one for book and high grade printing, one for white paper for bags, and one for Kraft liner board; also one Cylinder machine of record size and speed for the manufacture of floor covering felt. Other machines are under construction for the manufacture of M. G. Kraft specialties, facial tissues and high grade bristols.

Puseyjones Engineers will welcome the opportunity to work with you in solving production problems.

THE PUSEY AND JONES CORPORATION

Established 1848. Builders of Paper-Making Machinery
Wilmington 99, Delaware, U. S. A.



AVERAGE COAST PAY UPPED TO \$1.27

A one-week long meeting of the annual Pacific Coast "gold-fish bowl" negotiations between AFL unions and the Pacific Coast Association of Pulp & Paper Manufacturers ended May 11 with agreement on a 4% pay increase for men employees and 6% for women. (Approval of the agreement by the War Stabilization Board and local unions is considered assured, making it effective June 1.)

This raise, on top of the 15% increase for men and 10% increase for women, made effective last Jan.

Newsprint Shortage Will Continue for Two Years

Canadian newsprint mills are now operating at the highest rate in history, yet the shortage of newsprint will continue for at least two years. This prediction was made to PULP & PAPER INDUSTRY by a leading authority in this field.

Operating rate of Canada's newsprint mills is currently at about 92% of capacity, with only eight machines idle. A year ago 22 machines were idle and two years ago, 39. If the eight machines not in use go into production during the balance of the year, the rate will conceivably be still higher, but total output will still be insufficient to meet ever-increasing demands of publishers.

One of the difficulties in effecting an over-all increase by individual mills is the wide variation among them in rate of production. As a general rule, for instance, Pacific Coast mills have been operating at a much higher rate. During the past few years, some eastern mills have been down as low as 60 or 70% of their capacity. Obviously, there cannot be the same rate of increase at all mills regardless of what conditions may be during the coming months.

Newsprint Controls Removed in Canada

The last wartime control over newsprint in Canada has been tentatively removed with the suspension of the basic price ceiling of \$54 a ton on sales in Canada, subject to a "clear understanding" that Canadian prices will not rise beyond "historic differentials" below the United States quotations.

The announcement was made in Ottawa April 18 by Donald Gordon, chairman of Canada's Wartime Prices and Trade Board, who said price of news-

1, will bring the men's base hourly pay to \$1.09 and women's to 90½ cents. Remaining women employees in the industry are almost entirely in the finishing and converting divisions.

The latest increase will add \$1,800,000 annually to payrolls of the 33 California, Oregon and Washington mills (15,000 employees). Jan. 1 increases added \$5,000,000.

Perhaps more significant than the base rate is the fact that the average hourly pay for men will be approximately \$1.27. From 92 to 94% of all employees receive higher

than minimum pay.

Other results of the conference: (1) Non-restricted holidays on New Year's, Memorial and Thanksgiving Days, with time and a half pay if mills operate (there are three other restricted or non-work holidays); (2) new regulations for rest periods for women and meals for employees working long hours; (3) changes in some phases of call time, vacation allowance and overtime, and (4) annual union-management sponsored statewide safety conferences.

Puget Sound Pulp Plans Paperboard Mill

Plans for a paperboard mill to be built by Puget Sound Pulp & Timber Co. at Bellingham, Wash., to utilize a portion of the unbleached sulfite pulp produced at the big mill, have been announced by Lawson Turcotte, executive vice president of the company.

The company has applied to the city for vacating of a portion of waterfront property adjacent to the present pulp mill of 335 tons daily capacity. Production of the paperboard from a portion of this pulp would total 40 to 50 tons and the board is to be converted to packaging cartons for frozen foods, an industry which has expanded rapidly in the vicinity of Bellingham.

Washington and Oregon state produce over half the frozen food pack of the entire nation. Four new plants are planned in Whatcom County, where the Bellingham mill is located. These will be for berries, deep sea fish, fruit and vegetables.

The paperboard plant, to employ 75 persons, is projected for completion in 1947, providing a number of contingencies are settled.

KVP Ltd. Created; First Kraft Pulp June 1

A separate Canadian corporation of Kalamazoo Vegetable Parchment Co., designated KVP Ltd., was formed on April 1, at Espanola, Ontario. Ownership and assets of the Espanola plant were transferred to that company and common stock and notes issued to KVP in payment.

Officers and members of the board of KVP Ltd. have been announced. Ralph A. Hayward, president, Ben C. Avery, vice president and general manager, Norval Hunter, secretary, and Thomas Peck, treasurer, head the new corporation. Other members of the board are Harold Burke, woods manager, Senator William H. Maguire, Toronto, and C. H. Kleinstuck, Chares J. Monroe, Alfred Southon of Kalamazoo, Mich.

Operating personnel are being assembled at the present time with initial operations slated for June 1 for the unbleached kraft mill and in July for the bleaching plant. The mill will be in operation two months ahead of the schedule laid out three years ago, Ralph A. Hayward, president, told PULP & PAPER INDUSTRY.

print to Canadian consumers would probably advance enough to reflect increases totalling \$9 a ton which were granted in the U. S. in March, 1945, and January, 1946.

The "historic differential" represents the margin which existed before the war between the prices for Canadian domestic newsprint sales and for newsprint sold in U. S.

Canadian ceiling price of sulfite pulp was increased \$10 per ton and the price of kraft paper in Canada advanced \$12 per ton as from April 1.

Mill Will Return To Newsprint Field

Pejeboscot Paper Co., Brunswick, Maine, goes into operation of newsprint in the month of May. R. Sternberger of Hearst Consolidated, the new owners, told PULP & PAPER INDUSTRY in New York.

Complete capacity of newsprint will not be reached for some time, pending completion of contracts already held by Pejeboscot for other grades.

Port Royal Mill Sold to Irving Interests

Mill and properties of the Port Royal Pulp & Paper Co., Ltd., at Fairville, Fredericton and along the Saint John River in New Brunswick, Canada, have been sold to the K. C. Irving interests, according to announcement by A. J. Lacroix, vice president and manager. No major change in operation policy is planned at the present time.

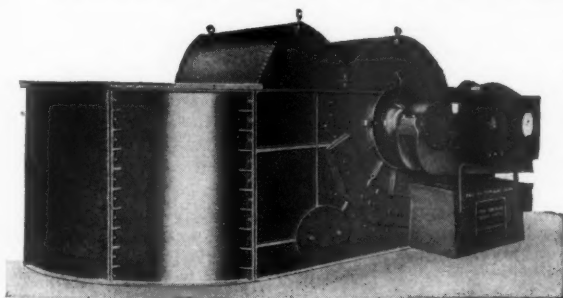
Mr. Lacroix says he will continue as manager for the time being. The company has 240 employees and the mill has a capacity of 125 tons of chemical bleached sulfite pulp per day.

Sweden Gets Coal

The fuel situation improved slightly in Sweden with agreement by the Emergency Committee for Europe and European Coal Organization to ship 900,000 tons of coal and coke from other European countries to Sweden in April-May-June. Reckoned on a yearly basis, this is about 40% of normal imports. So, Swedish pulp mills may be unable to get very much of it.



with the **JONES-BERTRAMS PATENT BEATER**

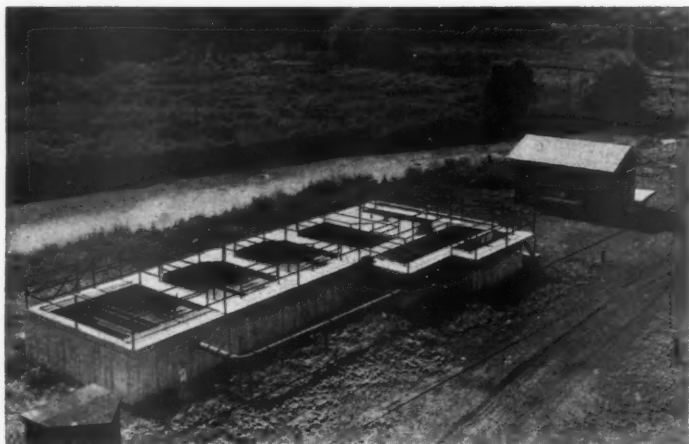


The greater paper mileage which the Jones-Bertrams Patent Beater delivers is the result of its unique design and construction. Replacing three, four, or even more regular beaters, its operation naturally provides for greater production . . . with horse power savings per ton from 35% to 60%.



Jones
E. D. JONES & SONS COMPANY, Pittsfield, Mass.
Builders of Quality Machinery for Paper Mills.

New White Water Recovery System Increases Pennsylvania Mill's Efficiency



General view of Link-Belt sludge collector installation at Beach & Arthur Paper Co., Modena, Pa., for recovering pulp from waste "white water" and avoiding pollution of nearby stream, western branch of the Brandywine. Tank is well guarded by hand rails. Pipe in foreground carries scum from revolving scum trough to sludge sump at other or influent end of tank. Also shows the separate tank or chamber containing L-B slow mixer.

Installations at the Paperville (Modena), Pa., plant of the Beach & Arthur Paper Company during 1945 have greatly increased the efficiency of waste water purification and reclamation of re-usable pulp content in effluent white water.

The improvements were in conformity with existing state laws directed against pollution of Pennsylvania streams by the discharge of factory wastes. A Straight-line sludge collector-conveyor, a horizontal slow mixer, and a Rotoline revolving scum trough were installed by the Link-Belt Co., of Chicago, in the waste settling tanks of the plant, located on the bank of the West Branch of the Brandywine Creek.

The Modena plant is a 30-ton-per day sulfite paper mill in Chester County, eastern Pennsylvania. It is steam and electrically powered. It has five beaters, three jordans, one 72-inch and one 124-inch Fourdrinier. A specialty mill, it produces all sulfite sheets in a full color range. Maximum sheet trims are 67 and 108 inches. Output includes manifold, writing, die wipe, and napkin.

At full capacity, the mill produces 450,000 gallons of waste water every 24 hours. This water is conveyed from the mill to a mixer tank, adjacent to the influent end of the

larger settling tank and like it of rectangular concrete construction. The mixer tank is five feet wide, 25 feet long, and has a water level depth of five feet.

The tank is equipped with the Link-Belt horizontal slow mixer consisting of two sets of redwood paddles, mounted on steel arms which are secured to a central horizontal shaft. The shaft rotates the paddles slowly, creating a circular motion in the liquid. This mixing results in cohesion of the fine particles in suspension. The mixer

is powered by a $\frac{1}{2}$ -h.p. electric motor controlled by a helical-gear speed reducer.

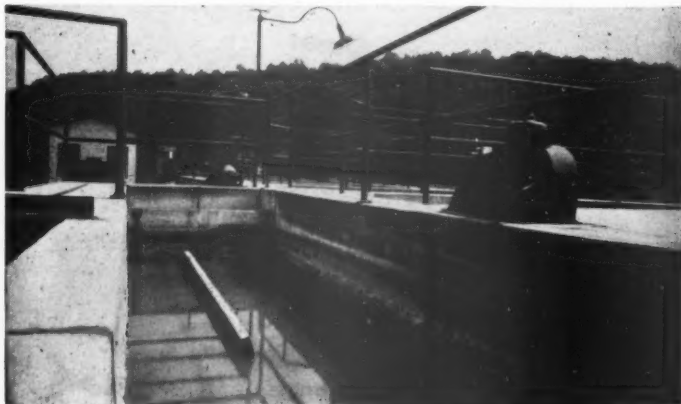
From the mixer tank the water passes into the settling tank. This tank is 16 feet wide, 60 feet long and has a water level depth of 10 feet. Within the tank is the sludge collector-conveyor composed of two strands of chain extended lengthwise of the tank. These chains are connected at 10-foot intervals by redwood flights extending across the width of the tank.

This collector-conveyor is operated with intermittent motion by chain derived from another $\frac{1}{2}$ h.p. motor equipped with a double-worm gear reducer with a speed ration of 1200 to one. The redwood flights are moved at a uniform speed of about one foot per minute along the surface of the tank, collecting the scum and transferring it to the Rotoline revolving scum trough.

The scum trough, or skimmer, is located at the effluent end of the settling tank just above the top run of the collector and extends across the width of the tank. The skimmer, a round pivoted trough 10 inches in diameter and open at the top, is tilted by an attendant at necessary intervals by means of a long lever attached at one end, permitting influx of accumulated scum. The scum is carried across the tank and discharged into an eight-inch castiron pipe. The pipe carries the scum back to the sludge sump pump at the influent end of the tank.

A combination of alum and soda

View of separate tank containing Link-Belt slow mixer, at Beach & Arthur Paper Co., showing one of the mixers' redwood paddles. Water was not up to operating level. At far end of mixer chamber is the $\frac{1}{2}$ -h.p. drive to paddle shaft. The $\frac{1}{2}$ -h.p. worm-gear reducer to collector-conveyor in settling tank is in upper right foreground.



Reduce Danger Of Suckbacks In Chlorine Lines

Are you experiencing suckbacks in your Chlorine lines when pressure is low? If so, you are probably finding it necessary to replace corroded valves frequently. There are methods of reducing the danger of these suckbacks, to get longer life from your valves, and reduce corrosion of your equipment.

Hooker Bulletin 208 prepared by our Technical Staff, gives clear directions on how to install a suckback pipe or where necessary, a vacuum break valve in your lines to reduce the corrosive effects of suckback. This is only one of a series of Bulletins that are helping pulp and paper makers get the most out of their chemicals and equipment.

The Hooker Liquid Chlorine Booklet is another Bulletin that should be in your chemical library. It contains general information about Chlorine, its shipment, handling and storage as well as particular information about its use in the pulp and paper field.

All Hooker Bulletins are available when requested on your letterhead. Send for these two now and for a list of the other Hooker Pulp and Paper Bulletins.

And for pulp and paper chemicals of uniformly dependable high quality, continue to specify Hooker Chlorine, Caustic Soda, Muriatic Acid and Sodium Sulfide as leading pulp and paper mills have been doing for years.

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Caustic Soda

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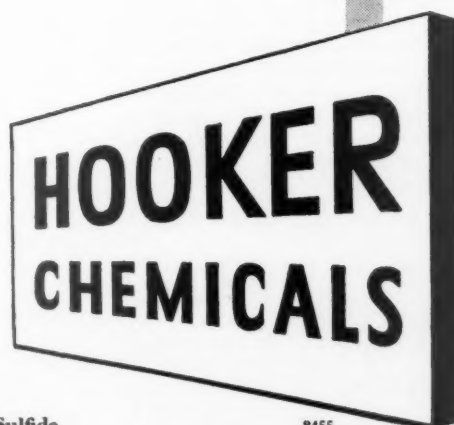
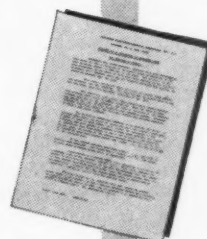
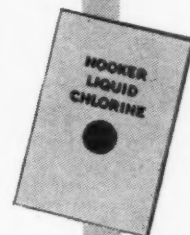
Sodium Sulfide

8455

May 1946

PULP & PAPER INDUSTRY

39





In this view of effluent end of settling tank, looking toward Beach & Arthur Co. mill building is seen, with water not up to operating level, a portion of Link-Belt sludge collector-conveyor; 10-in. diameter. Rotoline scum skimmer trough with operating lever; baffle plate; and troughs for run-off of clear water. Portion of collector-conveyor seen consists of a redwood flight and one conveyor chain passing over sprocket wheel on top-run shaft to sprocket wheel on bottom-run shaft.

ash is used within the settling tank as a purifying agent. The detention period is three hours and 40 minutes. According to state conducted tests 90% of the solids are recovered before the water is discharged.

Similar Link-Belt recovery systems are reported successfully operating in other Pennsylvania and Michigan mills.

The Beach & Arthur Paper Co. took over its present property in 1936. After extended remodeling together with new equipment, operation was started late in 1937. The mill was primarily set up to produce napkin stock for its own use and some outside sale of Jumbo rolls.

In 1940, the directors decided to enter the fine writing field. New finishing equipment was purchased; a new Hamlet high speed sheeter, two Seybold trimmers, and punch machine were installed and put into operation in May 1941. Its large paper machine started to produce Modena manifold, later on producing mimeograph and Light Weight Modena bond, Sub 12-lb. and 13-lb.

During the war, between 70% and 80% of its production was on government orders and for the war effort.

Present officers of the company are: T. F. Murphy, president; A. W. Redlin, vice president in charge of manufacturing; J. C. Hertzler, secretary and treasurer, and J. B. Briggs, assistant secretary-treasurer.



LINK-BELT CO., CHICAGO, announces patent of new free-rolling conveyor trolley. Unlike conventional I-beam trolley it has no wheel shaft, or spindles and does not require separate retainers for full complement of alloy steel balls.

The two basic elements (wheel and one-piece bracket) form the inner and outer race of ball bearings. It is shown here with part of one wheel and bracket cut away to illustrate this feature. Also shows a link of "rivetless" conveyor chain in place on trolley brackets.

Stadler-Hunter & Co.

John Stadler, Montreal consulting engineer, announces that his engineering firm will be known as Stadler, Hurter & Co., with offices in the Drummond building, Montreal.

Johns Manville to Build New Board Plant

Historic Natchez (Miss.) whose magnificent century old plantation homes draw an annual pilgrimage of visitors from far and wide, has been selected by the Johns-Manville Corp., as a site for an insulating board plant that will duplicate the installation at Jarratt, Va., built in 1938. The Virginia unit is the only one producing insulating board.

The initial investment in the new plant has been estimated at approximately \$5,000,000.

Announcement of the new plant site selection was made by Lewis H. Brown, corporation president. The unit is part of the \$40,000,000 expansion program announced last September.

Work on the project was scheduled for an early start, with completion set tentatively at 18 months. In full production, the plant will employ between 400 and 600 persons, with an annual payroll of approximately \$750,000.

The site is located about three miles southeast of Natchez, on the south side of St. Catherine's Creek. A six-mile pipeline will carry plant waste to the Mississippi river. Natural gas for fuel will come from a nearby line, and electric energy from an adjacent 110,000-volt power line of the Mississippi Power and Light Company.

Current plans call for the erection of a monitor type transite and steel building of fire-proof construction with about 300,000 square feet of floor space.

Pulp for the insulating board will be processed from shortleaf pine and hardwoods. While the company plans to furnish a ready cash market for farmers and other landowners, it has made an initial purchase of 40,000 acres of forest land from the Central Lumber Co., of Brookhaven, Miss.

The Natchez plant will have an annual gross capacity of 200,000,000 square feet of insulating board.

Second Charleston Machine To Operate This Fall

The West Virginia Pulp & Paper Co., Charleston, S. C., broke all of its production records in making an average daily production of 462.07 tons of kraft paper-board during the 28 days of February, according to T. A. Cook, resident manager. The preceding month, January, had an average daily production of 441 tons of kraft paper board per day. Normal production is 150 tons of wet lap pulp and 425 tons of liner board.

The Charleston plant has a machine 243 inches wide and 450 feet long. A similar machine will be installed as part of the company's two-year, \$5,000,000 expansion program now being carried out. The new machine will make wrapping and paper bag paper and wet lap pulp production will be discontinued. The new machine is to start operation this fall.

Lebanon-Tokyo Round Trip

A piece of heavy wrapping paper manufactured in the Crown Zellerbach mill at Lebanon, Ore., came back to its starting point after a journey to Tokyo. The paper was used to wrap a package sent to Cal Edwards, Jr., at the mill, by his son, attached to the U. S. embassy in Tokyo. A label showed the mill as manufacturer of the paper in Oct., 1943.

**"ON THE SPOT"
SERVICE**

to west coast paper mills



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AMMONIA
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Dependability and ready availability make Bear Brand chemicals the choice of many of the West Coast's largest paper mills.



DOW

CHEMICALS

INDISPENSABLE TO INDUSTRY

FORMATION, THE CRITERION FOR CYLINDER MACHINE OPERATION

By Bruce Brown, Jr.

Chief Chemist,
Fibreboard Products, Inc.
Vernon Division,
Los Angeles, Calif.

How many of us think of equipment, material, operation, and all factors necessary to make paperboard as means—and means only—of obtaining the best sheet that can be formed? At first thought, this query may seem somewhat unrealistic for our ambition certainly is to increase production, to improve quality, and to lower costs. Many times these three goals may seem to be opposed to each other and when this occurs, the limiting factor, although we may not be aware of it, is formation.

Perfect formation should be the goal toward which we are ever striving, for it is the one operating criterion which reconciles quality, production, and costs. An improvement in formation will invariably bring improvement in all three. Truly, formation is the heart of the process.

Why, then, do we sometimes lose sight of this, our one criterion of success in mill operation? Mainly because the biggest factor, by far, in obtaining perfect formation is the hydraulic system through which the individual fibres must flow while being formed into a sheet, and the designs of our present machines are far from ideal in this respect. Under these conditions operational problems often are so pressing that the effects on formation become secondary to those of getting a definite tonnage through the machine. This is certainly not an indictment of machinery designers and operators, but is pointed out to establish our present position in the history of cylinder machine development.

Three Problems

We readily recognize the extremely difficult task which confronts the designer of cylinder ma-

VAN OUNSEM BECOMES HEAD OF PASC; BRUCE BROWN, JR., WINS 1945-6 AWARD

John Van Ounsem, technical director, Pioneer-Flintkote Co., Los Angeles, was named chairman of the Paper Makers and Associates of Southern California at the Apr. 18 meeting, Rosslyn Hotel, Los Angeles. He succeeds Richard S. Buckley, superintendent, Fernstrom Paper Mills, Pomona.

The new chairman is William G. Hartford, U. S. Gypsum Co. Otto Sass, Flintkote Co., took over duties of secretary from Dr. Robert A. Baum, technical director, Fernstrom Paper Mills. New members named to the executive committee were: Alonzo H. Hatch, California-Oregon Paper Mills; George E. Eberhard, Fibreboard Products, Inc.; and Claude M. Sharp, West Coast Paperboard Mills.

The new executive board became a seven-member body instead of six. Retiring Chairman Buckley suggested that, in view of the rapidly-expanding paper industry in Southern California, a wider representative of executive personnel was desirable.

Bruce Brown, Jr., chief chemist, Fibreboard Products, Inc., was judged the winner over seven other contestants of the Cunningham \$100 Award for the best paper by members during the year. His paper, "Formation—the Criterion for Cylinder Machine Operation" follows on this page.

William A. Kinney, Pioneer-Flintkote production manager was chairman of the award committee. Judges included Dr. Glenn W. Klingaman, Flintkote Co.; Bruce Brown, Sr., Fibreboard Products, Inc., and Charles G. Frampton, Fernstrom Paper Mills.

The initial contest having brought a healthy response, it will now be carried on in each future year, in which it produces at least six contestants.



PRIZE AWARD WINNER, DONOR AND MEMBERS OF COMMITTEE (left to right): Charles G. Frampton, Frank Wheelock, George M. Cunningham, the donor, Dr. Glenn W. Klingaman, Bruce Brown, Jr., winner and author of the article on this page, and William A. Kinney, contest chairman.

chines by considering the problems listed below:

First: The flow of fluids is a very complicated branch of engineering based on empirical information, and this is further complicated by the presence of the fiber particles in our fluid system.

Second: Board production requires flows greatly in excess of true streamline flow, so the problem becomes one of controlled turbu-

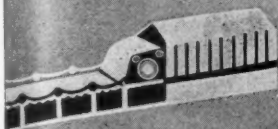
lance. Model study under such conditions becomes next to impossible. Therefore, new designs must be tried out in full scale equipment—a very costly procedure.

Third: Most board machines are required to make a large range of weights at corresponding differences in speeds which further complicates the hydraulic considerations.

Truly, only the stout in heart could tackle the problem of cylin-

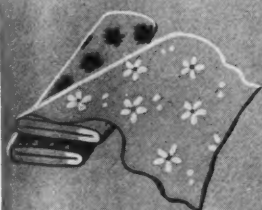
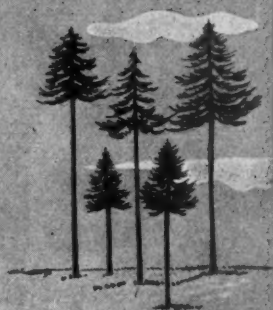
two decades of pioneering

A Continuous Record of Product Development



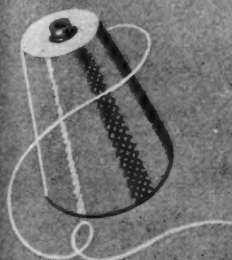
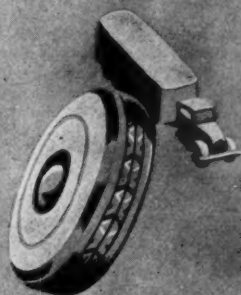
Since 1926, when it pioneered bleached sulphite paper pulp from Western Hemlock, Rayonier has been making scientific history in the interest of its customers.

Through research, the company perfected a rayon pulp from a brand new source of supply — Southern Pine. This opened up a new agricultural and industrial economy in the South.



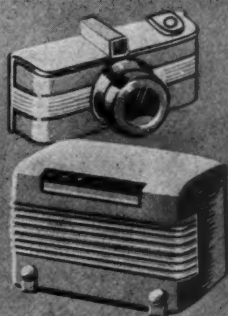
In 1930, the company introduced the first pulp from Western Hemlock for the viscose rayon industry. A dissolving pulp for use in making cellophane followed.

Another Rayonier pulp enabled the manufacture of high tenacity yarns for tire cord, contributing to one of the most outstanding advances made by the rayon industry.



Upsetting precedent, the next product was a pulp for the acetate rayon industry. A cellulose for nitrating purposes also was developed.

Special pulps have been developed also for making photographic papers, certain plastics and other cellulose-base products.



Pioneering requires initiative, vision, confidence and courage — a continuing search for new products and new uses. This is an underlying feature of Rayonier's customer program.

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AT PASC ELECTION meeting in Los Angeles:

Speaker's table: Left to right, Robert A. Baum, retiring secretary; John Van Ounsem, incoming chairman; Mr. Cunningham; Richard S. Buckley, retiring chairman; Dr. Glenn W. Klingaman, award judge, and William A. Kinney, chairman award committee. Others in this picture are identified in rows on each side of the two remaining tables. On the left side of left table, the two in foreground are Arthur Pensford and Frank Wheelock (elbow on table). Next trio (left to right): Charles Frampton, Jack Maurer and Asger Eilersgaard (elbow on table). Back trio (left to right): Ernest Dutcher, Glen Phillips and Frank Dilley.

Left table, right side (starting in foreground): William R. Monette, Jack D. Rhodes, A. R. Bollaert, G. E. Eberhard, Edward Benz, Oscar A. Bigler, L. W. Woodward and Otto Sass, incoming secretary.

Right table, left side (starting in foreground): W. A. Franklin, C. M. Sharp, R. W. Stevens, Kenneth D. Hewitt, Allan G. Strang, W. F. Hoffman, V. P. Cole, Merle L. Dorman, Jay T. Nicholson and Dale H. Price.

Right table, right side (starting in foreground): D. Erle Arnett, C. G. Berneking, Bruce Brown, Jr., Raul Rodriguez, A. H. Hatch, E. C. Hill, Lloyd I. Ramsey, John Herbert and A. L. Comstock.

der machine design. In spite of the immensity of the problem, we must, whether operating present equipment or considering new designs, always bear in mind the goal for which we strive, that of perfect formation.

Production

Let us examine concrete evidence found in everyday operation of our present machines which proves to us that formation is the one criterion that reconciles production, quality, and costs. First, let us look at production:

1. Experience has shown that bulking of the sheet results from "wet end finish" derived from even formation, because a lighter calendering can then be given the sheet to obtain the same finish. This means faster speeds or more square footage for an equal amount of tonnage, and it is accomplished without loss in strength or other qualities. The converting plant obtains more salable units per ton purchased.

2. Pressing at the wet end becomes more efficient, thus decreasing the load on the dryers and allowing an increase in speed.

3. Uniform pressing gives better felt life providing longer runs between felt changes.

4. Breaks on the machine and other such troubles as blows, checks, picks, and slipping are reduced, thus minimizing stock returned to the beater room.

5. A uniform sheet provides better contact on the dryers, thus improving drying efficiency and allowing an increase in tonnage produced.

6. And, if the hydraulic flow is improved by equipment changes to aid formation, production losses from slime and foam are greatly reduced.

Savings in Cost

Second, let us consider savings in cost which we have all seen when formation is improved. All of the above benefits to production are, of course, reflected in lower production costs, but in addition there are the following:

1. Good formation improves coverage of top liner stocks, thus allowing reduction in the quantity carried with consequent savings in the costly portion of lined boards. If perfection were achieved, the use of an underliner could be eliminated.

2. In test stocks, improved formation will increase strength, thus allowing a cheapening of the furnish to obtain proper sheet strength.

3. If the formation is improved by better design, power now often expended purely to shorten fibers for formation purposes is eliminated and only sufficient power to prepare the fibers for their role in the finished sheet is required.

4. Improved hydraulic design reduces or eliminates the necessity of using palliatives such as filter aids

in the sheet, foam killers, and such practices as setting up felt whippers, and frequent felt washings.

5. Some maintenance costs such as grinding couches and presses are minimized because wear is more even.

Quality Improvements

And third, let us examine quality improvements which result from better formation.

1. These are the benefits to the converter: Curling and warping disappear through the elimination of internal stresses built into the sheet. Finish is improved which provides better printability. Gluing is helped through uniform moisture content in the board and receptivity of adhesives is made constant. Dimensional changes are minimized, thus providing perfect squaring of cartons.

2. If coating of either the clay type or plastic form is to follow, a uniform highly finished surface, derived from excellent formation, will both improve the quality of the coating and reduce the amount required.

3. On test sheets, strength increases with formation improvement due to proper dispersion of the fibers. In addition, pressing is uniform and will not disrupt the wet sheet, nor is it necessary to strain the sheet by pulling up the draws on the wet and tender sheet in order

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Paul Bunyan found that time could be saved by squaring the trees where they stood and then felling them with great sweeps of his axe.

A reproduction of this incident from the fabulous life of Paul Bunyan—the sixth of a series—will be sent on request. It will contain no advertising.



At PASC meeting (left to right): Richard A. Buckley, Fernstrom Paper Mills, retiring Chairman; Claude M. Sharp, West Coast Paperboard Mills, and George W. Eberhard, Fibreboard Products, new Executive Committeemen; John Van Ounsem, Flintkote Co., new Chairman; Otto Sass, Flintkote Co., new Secretary, and A. H. Hatch, Calif.-Oregon Paper Mills, new Executive Committeeman.

to insure full contact on the dryers.

4. And, again, if formation is improved by machine design which provides proper flow on and from the wire, then the stock can be prepared strictly for the qualities of the particular board being made, and the maximum inherent value of the fibers can be utilized. Every sheet now being made on a cylinder machine will be improved in quality when this is eventually accomplished.

The Ideal Machine

Now let us describe the ideal cylinder machine. It is one which will be hydraulically correct, and will therefore provide perfect distribution of fibers on the wire with

no subsequent disturbance, regardless of the length or characteristics of the fibers. Furthermore, this will be accomplished over a wide range of cylinder speeds.

If such can be accomplished (and it is not beyond the realm of possibility) the hydraulic factor of formation would no longer be the stumbling block in improving the process.

We would then be able to investigate other ramifications of materials going into the manufacture, such as determining the best method of cooking individual pulps, the effects of water impurities, the incorporation of dispersing agents, the role of fiber charges, and the best refining methods, without having their effects largely or completely nullified by vat turbulence as now occurs.

The net result would then be savings and improvements in the grades of board now being made with an extension of the products into innumerable uses which have not yet been tapped.

Formation is the true hub around which the process revolves. We should learn to think of every one of our actions in terms of its affect on formation, for formation is the one criterion which improves costs, production, and quality simultaneously.

American Defibrator Inc. Handles Asplund Sales

American Defibrator Inc., of 405 Lexington Ave., New York, handling sales of the Asplund Defibrator exclusively in the U. S. and Canada, announces that at a recent meeting of its board of directors, Nils R. Johaneson was elected a director and chairman. Mr. Johaneson is president of Cellulose Sales Corp., and also is president of the Swedish Chamber of Commerce in the U. S.

At the same meeting, Mr. Uno Lowgren who has been a vice president, was elected president of the company.

F. K. Becker Now President Of Bird Machine Co.

F. K. Becker, for many years vice president of Bird Machine Co., South Walpole, Mass., has been elected president of the company, succeeding Phillips Dennett who retired April 1 after 35 years with the company, the past 20 years as its president.

Mr. Dennett has been president of the Pulp & Paper Machinery Association since its formation in 1933. When the pulp and paper machinery industry metals committee was set up to work with the War Production Board, Mr. Dennett was elected chairman of the committee and remained in that post until the WPB set up its own committee. At that time he was appointed WPB consultant on special machinery. He has also served on the advisory committee for the pulp and paper machinery industry.

Mr. Becker has been associated with Bird since 1916 except during World War I when he served as an army flying officer in France. He was made vice president in charge of sales in the company at the time Mr. Dennett became president. During the war he was placed in charge of manufacturing in connection with the company's heavy war production program and has functioned in this capacity as well as in charge of customer relations for the entire war period and up to the present.

Juckett's 10th Anniversary At Sandy Hill Iron-Brass Works

Frank A. Juckett, president of Sandy Hill Iron and Brass Works, was genuinely surprised with a tenth anniversary observance at his office April 1.

A huge basket of flowers greeted him and through the day a line of visitors from the shop, foundry and offices came to shake hands.

Since April 1936, when Mr. Juckett arrived, there has been a marked growth in the Sandy Hill plant. He brought with him a rich background of experience with Strathmore Paper Co., West Springfield, Mass., and Old Colony Envelope Co. of the same city. His association with Strathmore covered a ten-year period.

Sandy Hill employment expanded from 85 in 1936 to 700 during a winch-building program during the war. The plant has reconverted to the manufacture of pulp and paper machinery.

Minnesota Sets Up Pollution Commission

Under provisions of Minnesota Senate Bill No. 460, enacted in 1945, a Water Pollution Control Commission has been created. The commission is composed of the secretary and executive officer of the state board of health, the commissioner of conservation, the commissioner of agriculture, the secretary and executive officer of the livestock sanitary board and a member at large appointed by the Governor. The new commission has elected as chairman, Chester S. Wilson, commissioner of conservation.

Under the act, the commission has power to establish pollution standards and to issue permits for the discharge of sewage and industrial waste.

There are nine primary pulp and paper producing mills in Minnesota. At least three or four of these mills are going to be important producers for the big circulation magazines.

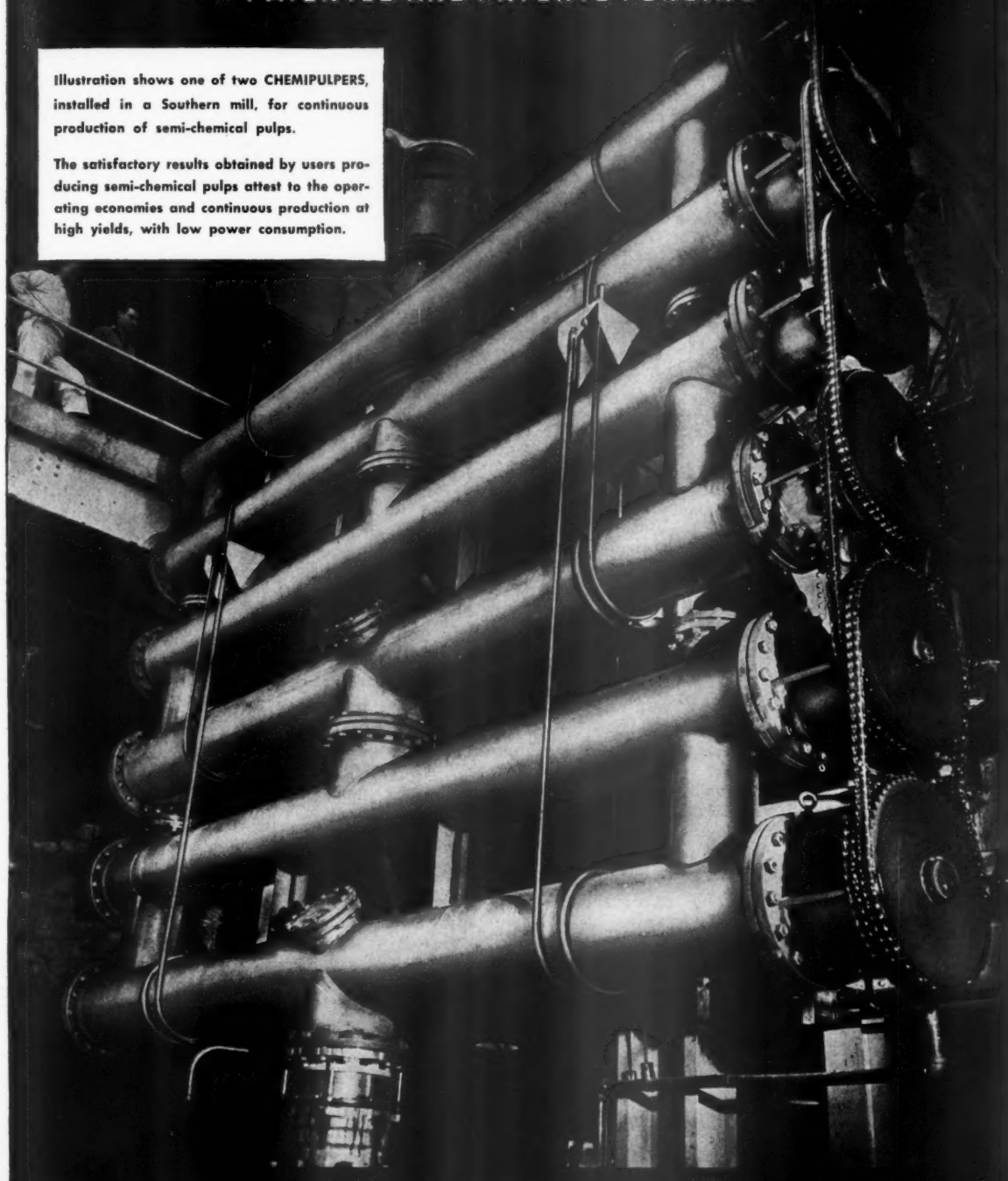


CHEMIPULPER

PATENTED AND PATENTS PENDING

Illustration shows one of two CHEMIPULPERS, installed in a Southern mill, for continuous production of semi-chemical pulps.

The satisfactory results obtained by users producing semi-chemical pulps attest to the operating economies and continuous production at high yields, with low power consumption.



PAPER and INDUSTRIAL APPLIANCES, INC.

122 EAST 42nd STREET

NEW YORK, N. Y.

SUPERCALENDERING OF MACHINE COATED PAPERS

A SUBJECT OF SPECIAL INTEREST

This paper, presented at the TAPPI convention in New York in late February, is of special interest to many readers of PULP & PAPER INDUSTRY who have followed this magazine's almost monthly reports of the plans for expansion in high-speed production of on-the-machine as well as off-the-machine coated magazine papers. These programs are being carried out in mills on the Pacific Coast, in the Middle West and in the East in order to meet the mounting demands of mass circulation magazines for paper. We have already reported the part which Appleton Machine Co. is taking in contributing to the special equipment for these mills.

By E. E. Thomas

Appleton Machine Co.,
Appleton, Wis.

Mineral coating the surface of paper covers a period of many decades, but the practical application of coating paper while in the process of being made, covers a period of the past fifteen years. Like other major developments, the rate of progress in the first few years was slow due to the conservative attitude of the paper and printing grades and the mediocre results obtained in processing through lack of technical data and experience. The rate of progress in the past ten years is indicated by the large tonnage produced today and the demands for greater production.

Much of the progress made can be attributed to enterprising management in sponsoring and pushing research and development programs in coating technology and the accumulation of valuable data in cooperation with pigment and adhesive manufacturers. On the consumers' side developments in printing technology and technique have contributed largely to furthering the demands for this paper.

The immediate problem facing the paper manufacturer is in meeting productive demands of the publication field for this grade of paper in the shortest space of time. The present development in machine coating is in the number of installations being made or contemplated and orders placed with equipment builders are indicative of the steps being taken to meeting the demand.

Mechanics of Calender and Supercalender Action

Before entering into the subject matter of supering coated paper, the writer is of the opinion that an outline of mechanics of supercalen-

dering may be of assistance to those interested in this phase of operations. To clarify, it will be necessary to refer by comparison to the calender stack and to state that the only part to be considered as far as effects on paper is concerned is the Nip.

The complement of chilled iron rolls in a calender are inert or non-resilient bodies and in calendering operations do not suffer deformation. Under these conditions the essential property of creep of material causing burnishing action on paper or coated surface is missing. If, as a result of calendering, the paper surface is polished or shined such effects originate from within the paper itself by virtue of its resilient qualities causing a creep of paper against roll surfaces. A calendar stack, therefore, only contributes its power to squeeze or compress.

The only physical difference between calender and supercalender is in the substitution of alternate inert chilled rolls by filled rolls made of material possessing resilient or elastic properties. The difference in surface effects of the paper between calender and supercalender operation does originate from the use of these filled rolls.

The behavior of filled rolls under operation is a manifestation of the law governing the behavior of resilient or elastic bodies and is known as the law of "Rolling Friction" and in brief is explained as follows:

"When an inert roll is pressed against a resilient roll a depression is created in the softer roll at the point of contact and the material is pushed out on either side of the arc of contact. If the rolls are rotated the resilient material will start to creep or flow in direction opposite to the direction of rotation causing a sliding of material against the inert roll surface and producing

a burnishing or polishing action."

Intensity is governed by the amount of resiliency provided, the relative diameter of rolls in contact, the nip contact pressure, and the speed of rotation. The supercalender, therefore, contributes its power to burnish, smooth or polish the surface in contact with the chilled roll which in the case of coated paper is the coating color.

From the above description of supercalender action, it will be apparent that the proper selection of filled rolls to suit the conditions is of major importance for it is the behavior of these rolls that influence results in finish values of coated papers.

Filled Rolls

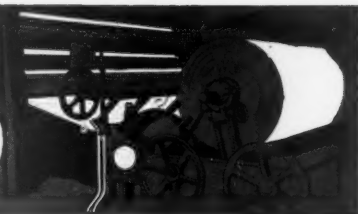
Before the advent of machine coating, supering demands on all grades of paper were fulfilled by the use of hard blue paper type roll for uncoated and semi-coated papers and the soft raw cotton roll for the conversion or heavy coated papers.

In the machine coated group of papers, the blue paper serves to satisfy the wash or light weight coatings but with the increase in coating weights this type was found unsatisfactory and was replaced by the raw cotton type with much improvement in finishing qualities. However, experience indicated that their life was too short for economy of production. The insistent demands for a type having the durability of the blue paper roll and the finishing qualities of the raw cotton roll was a challenge to roll manufacturers.

Through close cooperation of manufacturers of machine coated papers and by research and experience, a type of roll fulfilling the requirements was developed and has been in satisfactory operation for a period of the past four years, thereby completing the group of roll types needed to meet all demands.

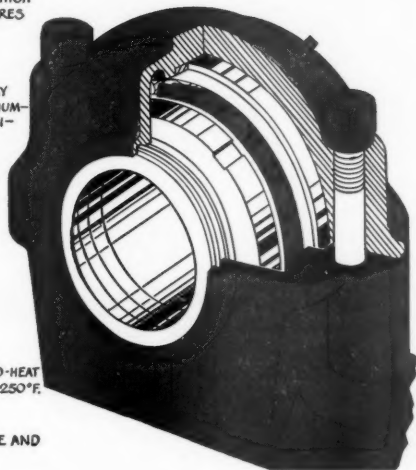
This experience in the application of rolls suitable for machine coated papers furnished further evidence in support of the claim that no one type would satisfy the demands on all grades of coated papers. The weight of coating used was a general guide to the type roll desired and that the three types of hard, medium, and soft rolls could be as-

STANDARD ENGINEERS NOTEBOOK



CALOL S. A. GREASE ASSURES
GOOD LUBRICATION IN HIGH
AMBIENT TEMPERATURES

CALOL S. A. GREASE MAY
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AND HIGH-SPEED ANTI-
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WITHSTANDS RADIATED-HEAT
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MINIMIZES DRIPPAGE AND
LEAKAGE TROUBLE

New grease lubricates in extra hot conditions

Developed especially for bearings that must operate in radiated heat, new Calol S. A. (sodium aluminum) Grease has proved satisfactory in temperatures over 250° F. It has been tested by many operators on working machines in the field. In addition, it was given a series of tests in the Navy Ball Bearing Machine, operated at 10,000 rpm, with bearing temperatures maintained at a high degree.

Calol S. A. Grease is made from a special type base and selected oils that give it high heat-resistant qualities. In use, these qualities assure minimum drippage or leakage from bearings.

Although Calol S. A. Grease is ideal in a multiplicity of services, it is specifically adapted to the lubrication of low, medium and high speed anti-friction bearings used in all types of machines.

Made in three grades, 00, 0, and 1, by Standard of California, Calol S. A. Grease is available in 35-, 108- and 420-pound containers.

Standard Fuel and Lubricant Engineers are always at your service. They'll gladly give you expert service—make your maintenance job easier. Call your local Standard Representative or write Standard of California, 225 Bush St., San Francisco 20, California.

Compounded Motor Oil keeps ring-belt cleaner

More power from the fuel consumed in gasoline engines can be obtained with RPM Compounded Motor Oil.

One hundred percent paraffin base, RPM Compounded Motor Oil contains a detergent or cleansing agent that loosens and removes deposits of sticky gum-carbon left on rings, pistons, cylinders and in the oil system by ordinary oils.

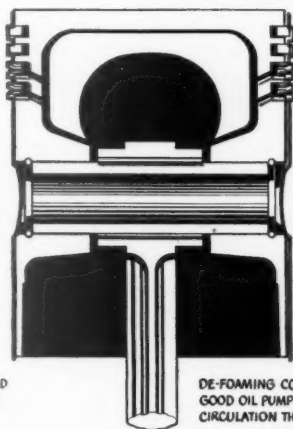
It keeps these parts cleaner, gives the oil unusual adherence to metal whether hot or cold, and therefore allows it to form a tight seal at the rings. This lets engines develop more power by preventing blow-by and excessive piston drag in starting and running.

A de-foaming compound in RPM Motor Oil eliminates the danger of air locks in oil pumps or oil pipes caused by bubbles. An adequate supply of oil is constantly delivered to working parts, reducing friction to a minimum. Other compounds in RPM Motor Oil resist oxidation, corrosion and sludge formation.

RPM MOTOR OIL CONTAINS SPECIAL CLEANSING
AND ANTI-OXIDATION COMPOUNDS

RPM COMPOUNDED MOTOR OIL STICKS ON
HOT OR COLD METAL—REDUCES STARTING
AND RUNNING WEAR

DETERGENT KEEPS
OIL-RING SLOTS
UNCLOGGED—PRE-
VENTS OIL-PUMPING
AND BLOW-BY



RESISTS CARBON AND
SLUDGE FORMATION

DE-FOAMING COMPOUND ASSURES
GOOD OIL PUMP ACTION AND
CIRCULATION THROUGH OIL PASSAGES

FOR EVERY JOB A **STANDARD OF CALIFORNIA** TEST-PROVED PRODUCT

Heron Rejoins Crown Zellerbach as Vice President; Headquarters Operating Staff is Reorganized



Alexander R. Heron has returned to the staff of Crown Zellerbach Corp. in his former position of vice president, in charge of industrial and public relations. After taking a much needed vacation he will resume active duties, relieving F. A. Drumb, who has been functioning for Mr. Heron during his military leave and his service with the State of California.

Mr. Heron left his Crown Zellerbach post in August, 1942, to serve for 15 months as a Colonel in the Army. Later, at the request of the Governor of California, he was loaned by the Army to the State to serve as director of the Reconstruction and Reemployment Commission.

Mr. Drumb will rejoin the headquarters operating staff, which will be re-



FRANK A. DRUMB (left) who has turned over Industrial and Public Relations Department of Crown Zellerbach Corp. to ALEXANDER R. HERON (center). Mr. Drumb becomes Assistant Manager of Manufacturing and will be in charge of converting operations.

MR. HERON, in uniform as Army Colonel when he was Chief of Civilian Personnel Branch, Services of Supply. He has returned to Crown Z as a Vice President.

REED HUNT (right) who in reorganized headquarters operating staff under Vice President Bankus, will be directly responsible for primary manufacturing.



organized as follows:

Albert Bankus, vice president, continues in charge of production and converting operations and assisted by Reed Hunt, will have direct responsibility for primary manufacturing operations, beginning from the time logs or pulpwood are delivered to mill storage and ending when jumbo rolls are delivered to converting plants or carriers, or with jumbo rolls finished into non-converted products delivered to carriers.

Mr. Drumb, as assistant manager of manufacturing, assumes direct responsibility for secondary manufacturing, which begins with rolls delivered to converting plants or departments and includes all converting operations, that is, all operations that start with finished paper and perform further work on it, and ends with the finished converted products delivered to mill shipping department, or to carriers in case of self-contained separate converting plants.

signed for use to the three groupings of paper such as uncoated or semi-coated, machine coated, and conversion or heavy coated, respectively.

Roll Selection

Filled rolls have a direct influence on the attainment in surface qualities and, therefore, are more closely related to the coating properties than to the physical properties of the paper. The prime factor to be considered in their selection is the amount of Nip action required by the coated paper to produce the desired result in gloss or finish or smoothness. The amount of clay and other pigments used in the coating and the resilient properties of paper determine the amount and intensity of Nip action required. Some papers demand the use of rolls giving an intense nip pressure with

less creep such as hard roll, while other papers require the use of rolls with more creep and less intensity of pressure, such as the soft type roll. Among other considerations in roll selection is the limitation in ability of existing supercalenders to meet the demands of speed or pressure essential to results with certain type rolls.

Modern Supercalender

To maintain finishing capacity in keeping with machine coating production it is essential that the modern supercalender be designed with the objective of eliminating as much as possible the down-time from mechanical failure under the increased widths, speeds, pressures, and weight involved in supering machine coated paper.

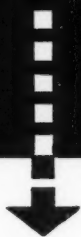
To meet the demands in widths commensurate with paper machine

trims and speeds, the framework is massively constructed of fabricated welded steel and designed to permit quick and easy removal of all rolls.

Rolls are equipped with anti-friction bearings to provide a stack free from oil accumulation and maintain rolls in vertical alignment at all times. This avoids paper wrinkling and damage to filled rolls. Bearings are housed in oil tight and dust proof housings and are lubricated by a forced feed system. Endwise expansion of rolls is provided for by the bearings on off drive end.

The more exacting demands for precision control of pressure, speed, and web tension have been met with the aid of developments in hydraulic pressure control equipment. The finer control in speeds has been attained by the change from A.C. to D.C. electric drives and controls

for better fruit wraps



Associated Paper Oils 1 and 2

Use Associated Paper Oil Number 1 for deciduous wraps and for other foods where wraps come into direct contact with edibles. Number 2 is for citrus and other non-contact uses.

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Every lot of Associated Paper Oil is sealed at the refinery, in contamination-proof containers. Every lot is guaranteed to meet

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**Correct Lubrication
is Machinery's Most
Vital Need**



**TIDE WATER
ASSOCIATED
OIL COMPANY**



D. W. AMBRIDGE, recently elected President of Abitibi Power & Paper Co. in Toronto. His election has special significance in view of company's removal from receivership in near future and subsequent corporate operation. Mr. Ambridge was formerly an executive of Ontario Paper Co. During war he served Canadian government as Director of Naval Shipbuilding.

provided against damage by the use of electric interlocks.

Automatic control of web tension has been made possible by means of the electric motors and braking type generators interconnected with main drive to assure uniformity in tension regardless of speed changes.

The unwind and windup apparatus is of the fixed centerwind type equipped with spools resting in antifriction bearings supported on suitable stands. The unwind stand is located near top of stack to shorten draw and eliminate draw wrinkles. The windup stand is located on floor close to bottom roll. Both unwind and windup apparatus is similar in appearance and can be equipped for manual or automatic control of web tension. In the conventional arrangement the unwind tension is hand controlled and on the windup is electrically controlled.

The stacks are furnished complete with its complement of spread, guide, and fly rolls balanced to compensate for the high speeds and mounted in antifriction bearings supported in adjustable brackets. The chilled iron rolls are provided with motor operated oscillating type doctors interlocked with main drive to prevent oscillation until rolls are in motion. Intermediate chilled rolls are bored for admission of steam and provided with steam joints.

The hydraulic system for use in applying pressure and in separating rolls is self contained and comprises

hydraulic cylinders, pump, storage tank, and pilot control valves, etc. All apparatus is protected against excess pressure.

The bearing lubrication system is also self-contained and comprises pump, filter cooler, flexible hose connection with metering type sight feeds to each bearing of main rolls.

Stacks are made to suit the conditions and are built in widths ranging from 60" to 200" and above. They have a complement of 10 to 12 rolls including a double finishing element and are designed to meet the demands of machine coating for speeds up to 1800 FPM and bottom nip pressure of 2000 pounds per inch of face.

Complete units include suitable sized electric drive and controls for direct drive through speed reducer to bottom roll.

Supercalendering Machine Coated Paper

It is not the intention to enter into a discourse of paper making or coating technology, but to deal with such items as are related to supercalender procedure. The process of conversion or supering is an important factor in the production of machine coated papers. Through this procedure, the latent qualities of the coated sheet are made visible and suitable for printing purposes. Supering the coated paper does not add to its quality but merely enhances the latent properties in

HADLAI HULL, elected Assistant Secretary of Minnesota & Ontario Paper Co., 500 Baker Arcade Bldg., Minneapolis 2. Native of New London, Conn., Mr. Hull graduated from Choate School and Yale (law-1939) and served four years with U. S. Navy in Atlantic, Mediterranean and Pacific. He was honorably discharged as a Commander and his duty included command of a destroyer escort.



WILLIAM E. LOCKE, since 1940 Resident Engineer for Pacific Mills, Ltd., at Ocean Falls, B. C., has been appointed Assistant Resident Manager, according to announcement by President Paul Cooper. British-born, Bill Locke received his education in Victoria and Vancouver, B. C., graduating in mechanical engineering at University of British Columbia in 1930, when he joined the staff of Pacific Mills.

coating by mechanical action. This result, therefore, is more closely related to the coating than to the paper making process. The standard of quality in the surface results of supering is to a major extent established by coating technology and technique and the control of quality in the hands of technicians operating from the laboratory. Through them should emanate the changes in coating formula or procedure to attain the standard in results. Not all of the responsibility for standard in quality can be placed on the coating process, because supering action and results are also influenced by the quality of paper.

Paper and Coating Specifications

The specifications covering the requirements of coated paper for printing purposes have been well standardized through experience and paper made meeting these specifications is satisfactory for the supering process. The chief requirements for economical and quality results in supering is uniformity in such properties as moisture content, resiliency, weight, caliper, and density. All of these properties influence the surface qualities such as gloss, smoothness, shade and finish. Weight, caliper, and density are paper properties influencing the life of filled rolls and productive capacity of the stack, while uniformity in moisture content and resiliency are

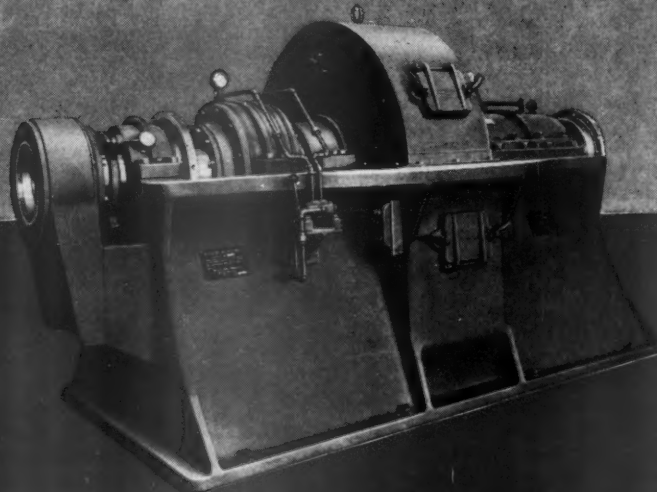
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RUSSELL M. COOPER (left) General Superintendent, and JOHN A. "JOCK" KYLES (right) Mill Secretary, Powell River Co., have been appointed Assistant Resident Managers and will report direct to D. A. Evans, Resident Manager. Announcement was made by President Harold S. Foley. Mr. Cooper has been with Powell River five years, having joined company as successor to late Grant Fowler in 1941. He was born in Howick, Quebec, educated at McGill University, was overseas with Canadian Engineers in World War I, and was General Superintendent at Quebec North Shore Paper Co. In his new role "Russ" Cooper will have supervision over all mill and waterfront operations, maintenance, power houses, etc. "Jock" Kyles will be in charge of general offices, townsite, cafeteria and other duties not directly associated with production. He joined company in 1925 as cost accountant. Glasgow-born and educated, he served with Royal Canadian Air Forces, 1941-1945.

essential to uniformity in surface and stretch or shrink qualities.

The coating formula is governed by the items covering surface qualities as specified by the customer and with due consideration of the limits in ability of the desired qualities. The general specifications covering coating requirements from a supering viewpoint call for a uniform application of well dispersed pigments and adhesive possessing the necessary bonding properties and having resilient or elastic qualities commensurate with paper resiliency.

Operating Procedure

With coating technology in the hands of the control laboratory and operating procedure established on one grade of paper together with the use of modern supercalendering equipment, the problems of the stack operator are simplified and permits his maintaining productive schedules.

For maximum production, paper from machine should be rewound and edge trimmed. This procedure insures a uniformly wound roll and with undesirable paper culled out slow down or stoppage for breaks in paper is reduced. The rewind rolls assist in maintaining uniform finish and web tension with less tendency for paper draw wrinkles and marking of filled rolls. The

practice of allowing paper machine rolls to season before supering makes for uniformity in moisture content and better supering.

Running procedure is confined to miscellaneous adjustments essential to attainment of results in finish and to maintain roll surfaces in good condition to avoid interruption in production. An experienced operator will keep a close watch for conditions in both paper and stack that may lead up to a possible interference with smooth operation. The major portion of the operator's time is devoted to noting behavior of paper in running and of inspecting results of supering.

Paper from stack should receive a final inspection as it is being rewound and undesirable paper removed. Edges should be trimmed and ends of roll wire brushed to remove fuzz and to improve appearance. Rewound rolls of supered paper assist in better lay of paper in printing presses, better printing results, and a more satisfied customer.

Summary

The rapid growth in machine coating paper together with those in the printing field and its acceptance by the graphic arts industry as a satisfactory product has established this phase of paper manufacture as a major development of the paper

industry. Its scope will broaden as developments in coating technology advance, not only in pigmented coatings, but also in the field of synthetic compounds and resin.

To maintain economy in conversion of machine coated papers, supercalenders must keep pace with paper machine in both width and productive capacity. This makes obsolete the use of the pre-war conventional supercalender in this field of coated paper. These conditions require modern units of massive construction to accommodate the increase in width, pressure, speed, and power.

Supercalendering is a mechanical conversion process by means of which the latent qualities of a coated paper are made visible and that its action does not add anything to latent qualities of the coated paper, but only enhances such qualities.

Supercalender action has a direct bearing on the surface values of the coated paper and is closely related to the coating process. Responsiveness to supercalender action is proportional to the quantity and kind of pigments used in coating and upon the physical characteristics of the paper. The attainment in end results is largely dependent on the quality of coated paper furnished by the paper mill to the supercalender.

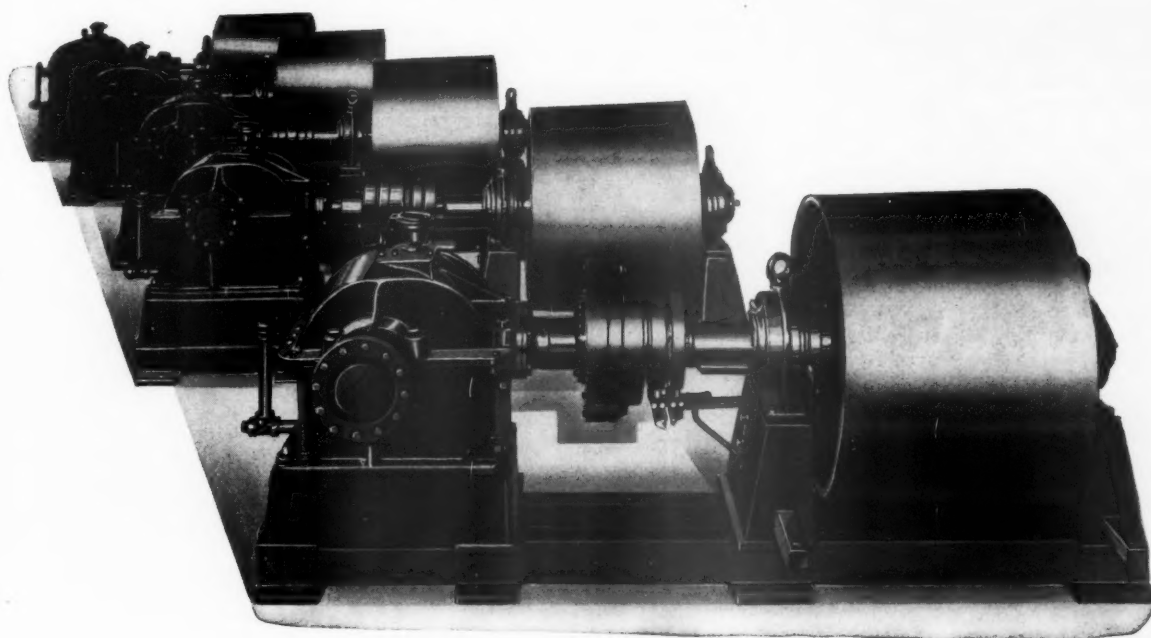
The supercalender can only contribute its power to rub or burnish the surface of coated paper and that such burnishing action is dependent upon the amount of resiliency provided by filled rolls and of the paper being supered.

New Equipment At Gulf States Corp.

Installation of new equipment as part of a program interrupted by the war has been resumed by Gulf States Paper Corp., Tuscaloosa, Ala. Completed to date has been the installation of a new Babcock & Wilcox recovery unit which will be supplementary to existing facilities. Other installations include a new 7500 KVA Westinghouse turbo generator and a Cottrell precipitator.

Machinery that has been purchased but not received as yet includes a Goslin-Birmingham evaporator, a Dorr causticizing unit, and an American Hoist and Derrick Co. crane for the woodyard.

The Westinghouse turbine is of the latest streamline type with all improvements effected to date. It is the same size as the unit already installed in the plant, with the addition of an exciter on the generator shaft. The steam end is of non-condensing type, being designed to take steam at 450 pounds pressure and 650 degrees Fahrenheit temperature. From an extraction stage supplies steam to the 150 pound header and exhausts at 40 pounds into the mill line. The new turbine will operate in parallel with existing equipment and its installation will make possible overhaul of electric generating set without plant shutdown.



Bagley & Sewall **NEW ASSEMBLED DRIVES**

A Spiral Bevel Gear Unit, Magnetic Clutch and Cone Pulley, as illustrated above, is only one of several different variations of Bagley and Sewall Floor Drives as assembled of standard stock parts. Depending upon speed, ratio and power requirements of each application, the units may be composed by using Hypoid Gears or Worm Gears instead of Spiral Bevel Gears; also, the clutch may be of any type Friction Disc, Magnetic or Airflex. Instead of a cone pulley other types of variable or fixed speed methods may be employed.



THE BAGLEY & SEWALL COMPANY

Builders of Paper Making Machines

WATERTOWN, NEW YORK

PUBLIC RELATIONS FOR PULP-PAPER INDUSTRY

By Arthur J. C. Underhill

Chairman of Subcommittee on Public Relations
of American Paper and Pulp Association



An active program of public relations for the paper and pulp industry is now more than a possibility. In recognition of an expressed desire for improved relations of the industry with its public, the American Paper & Pulp Association last December assigned a committee to study the situation. This committee concluded its preliminary work in February in time for Paper Week, when it received the approval of the executive committee and board of governors of the association for the general plan it then proposed.

It was the conclusion of the committee that a need existed for developing a warmer acceptance of policies and practices of the industry, as well as its products—for developing the machinery to acquaint the public with the fundamentals of the industry, its products and services—for coordinating the public relations activities of the various divisions of the industry—and for developing a program to meet the requirements of the situation.

The committee proposed that an industry-wide public relations plan should be developed to reach the following four general objectives:

1. To gain public understanding, confidence and goodwill for the paper and pulp industry as an alert and resourceful force in American life—nationally and locally—and to secure widespread recognition that this industry by reason of invested capital, number of workers and the volume and importance of its products is a vital part of the nation's economic structure.
2. To supply the industry, the press and radio with basic information demonstrating that paper and pulp are of great significance in time of peace and revealing the industry as progressive and competitive, a good example of individual enterprise successfully at work.
3. To achieve unity of interest and action through an industry-wide program, providing a common denominator which will deserve and receive the support of all elements of the industry for their mutual benefit.
4. To gain, through proper administration of the program, numerous secondary benefits such as improved employer-employee relations, more workers and bet-

ter workers for the industry, wider acceptance of established paper items and quicker acceptance of new paper products, and the promotion of free initiative and the American way of life through citing the paper and pulp industry as a good example.

To achieve these ends, the committee suggested an action program designed to reach every segment of the industry's public and each arm of the industry itself. The "blue-print" detailing the various projects to be undertaken is now in preparation and will embody the use of all appropriate media in a general educational campaign, with each project to be slanted toward a specific objective and audience.

The committee is purposely limiting its considerations to development of prestige for the industry as a whole, and promotion of products and services, beginning where the "tree growing" programs end. The activities would not conflict with any programs now under way or presently contemplated, but rather, would dovetail into them, coordinating all for the benefit of the industry as a whole.

Administration of the master plan would be in the hands of the committee. To obtain the maximum results, it is planned to enlarge the present committee to include representation from all parts of the industry, and then make the full committee a permanent advisory and

action group. The results of their deliberations would be activated by a small paid public relations staff to operate from A.P. & P.A. headquarters.

Enduring public relations cannot be won overnight, for the public consciousness is ephemeral and fleeting. In recognition of this fact—that the industry must be "sold" to the public continuously—this "starting program" is set up on a three-year basis.

Goodwill is seemingly intangible, but its effects are important and far-reaching. On the basis of experience of the committee it is expected that through operation of the program the desired goodwill will be developed as well as achievement of the fundamental aims of the industry.

Robt. Nivison, Jr., Is Assistant to President

Robert Nivison, Jr., has been appointed administrative assistant to the vice president and manager of mills of Hollingsworth & Whitney Co., at Waterville, Maine.

Mr. Nivison was formerly engineer and sales representative for Improved Paper Machinery Co., of Nashua, N. H., with headquarters in Appleton, Wis.

Western Paper Converting Co. Adopts Vets Plan

Veterans' apprenticeships will be instituted at Western Paper Converting Co., Salem, Ore., as the result of a meeting called by Lloyd Riches, general manager, on April 11. Local veteran group representatives attended to hear the discussion and participate in setting up the plan.

Natural Gas Tax Would Hit Industry

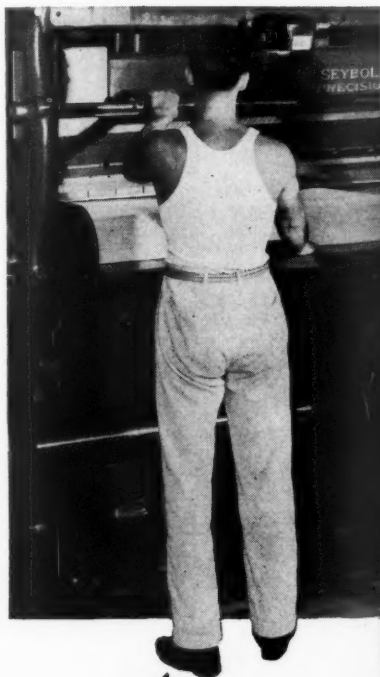
Opposition to a proposed increase in gathering tax on natural gas in Louisiana from the present $\frac{1}{2}$ ¢ per M feet to 3¢ per M feet was voiced by industry representatives in a hearing conducted in Shreveport, La.

H. S. Galloway of Mobile, representing Southern Kraft division of International Paper Co., said the proposed tax increase would add \$235,385 to annual operating costs of the company's two plants at Bastrop and one at Springhill. The three plants employ 3,812 and more than 2,900 work in the woods.

Twenty-five per cent of the net profit of the Celotex Corp. at Marrero would be absorbed by the tax increase, W. P. Bowker of that firm testified.

R. W. Allen, of Brown Paper Mills Co., West Monroe, testified the tax lift would increase the company's expenses \$161,700 annually on the basis of 1945 operations, adding 90 cents a ton to costs of production.

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"FROZEN DINNER" PICTURE BRINGS INQUIRIES; KEYES FIBRE EXPLAINS ITS ROLE IN NEW FIELD

The March cover picture of PULP & PAPER INDUSTRY showing scenes in production of a complete "frozen dinner" on a resin-glazed wood pulp dinner plate brought many interested inquiries to this magazine.

While this example of a new process which makes it possible to market a complete partially-cooked dinner—only requiring a slight "warming-up"—was found in operation in a Long Island plant, several readers suggested it could be duplicated successfully in other regions of the country. It proved of particular interest in the Pacific Northwest, where "frozen foods" have developed more rapidly than anywhere else and where now about 50% of the nation's frozen foods are being packed.

One of our letters, received last month, came from W. E. Parsons, vice president and general manager of Keyes Fibre Co., Waterville, Maine, manufacturers of the plate for the "frozen dinner."

He said "there seems to be some confusion as to the type of article Keyes is providing for this service" and explained that the plate, when it leaves Keyes plant, is "molded pulp strictly."

Our article actually stated that "the dinner plates are covered with a resin-glaze that resists freezing temperature, de-frosting and final cooking" and that "this glazing is done by the Maxson Corp" (which prepares the food, also).

But we are glad to stress the point that the original plate contained no resin, as Mr. Parsons wishes to emphasize. In our March article we said Keyes makes both (1) plastic and (2) ordinary wood pulp molded products, but we neglected to specifically state to which group the plate in question belonged. It is one of the second group and not to be confused with Keyes' so-called Kys-Ite line of fibrous plastic products.

Mount & Alsop Is New Name of Coast Firm

Mount & Alsop, Inc., is the new name of the Pacific Northwest pulp and paper mill supply firm which has heretofore been known as the Hall-Mount Co., Inc. It continues to make its headquarters at 902 N.W. 14th Ave., Portland 9, Ore.

H. G. Mount and F. E. Alsop are officers of the company which supplies chemicals, rosins, lithopone, colors and clay to mills.

New Officers of Pioneer Rubber Mills

Pioneer Rubber Mills, manufacturers of industrial rubber goods, has announced voluntary retirement on April 1 of D. D. Tripp, vice president, after 46 years of service.

G. S. Towne was advanced to chairman of the board, H. R. Mansfield to president and the election of three new vice presidents were elected, E. P. Coxhead, S. M. Suhr and F. W. Swains, the latter in charge of factory operations, Pittsburg, Calif.

Edward Bullard Joins Perkins-Goodwin

Edward C. Bullard recently joined the paper division of Perkins-Goodwin Co., 30 Rockefeller Plaza, New York, after four and a half years in the Army from which he was discharged as a master sergeant. He saw service in Australia and New Guinea. Mr. Bullard, a graduate of the University of Maine, is a son of H. F. Bullard, vice president of Finch, Pruyn and Co., Glens Falls, N. Y.

Sorenson Returns To Paper Industry

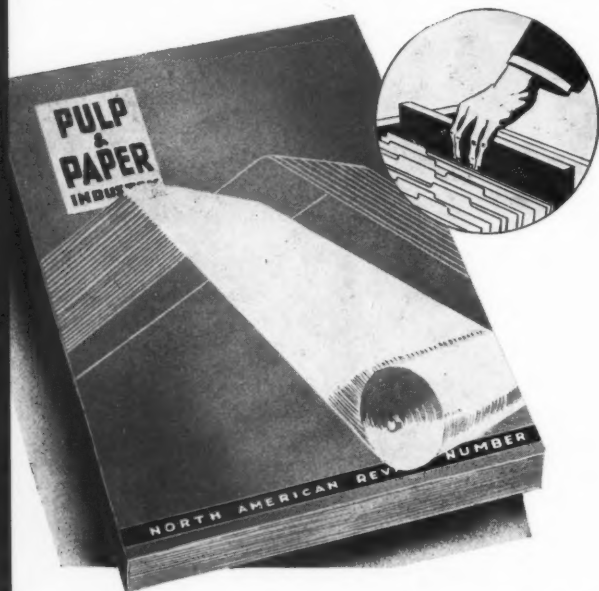
Stanley E. Sorenson, of 2782 Dean Blvd., Minneapolis, Minn., has returned to civilian life after war service, including 38 months in Europe as an anti-aircraft battery commander.

A 31-year alumnus of University of Minnesota, he was previously employed in a wide range of jobs, learning the industry in the Pulp Division of Weyerhaeuser Timber Co., in the Cloquet mill of Northwest Paper Co., and in the sales field for Newhouse Paper Co., Moline, Ill., and he plans to return to the industry in mill or brokerage representation.

Paper Industry P.A.s Rate Top Offices

Stanley Ringheim, Crown Zellerbach Corp., Seattle, and Kenneth Knudson, Everett Pulp & Paper Co., Lowell, Wash., were recently elected, respectively, first and second vice presidents of the Purchasing Agents Association of Washington State.

HERE IN ONE VOLUME—ALL THE FACTS!



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The 1946 North American Review Number!

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R. M. Wade & Co., Which Handles Several Pump Lines, Is Expanding

Wade Newbegin, president of R. M. Wade & Co., Portland and Seattle, which handles several lines of pumps for the pulp and paper industry, has announced expansion of the company's Seattle branch and removal to new and larger quarters at 818 First Avenue South.

The move was scheduled for May 15 and the branch continues under management of Fred F. Pringle who has been its manager for the past four years.

R. M. Wade & Co. is one of the largest distributors of industrial and agricultural pumping equipment in the Pacific Northwest. The company was founded in 1865. Among the foremost pump lines it represents are Peerless, Goulds, Gardner-Denver and Barnes Pumps which includes specialized pumping equipment for the pulp and paper industry. Facilities of the new location will include sales, service and warehouse space sufficient to take care of the company's rapidly expanding business in the region.

Mr. Pringle, well known in the Seattle industrial field, said: "Our plans for increased facilities became necessary to keep pace with the needs of industry for modern equipment."

Penn Salt Plans Portland Expansion

The Portland, Ore., plant of Pennsylvania Salt Manufacturing Co. has announced a \$1 million expansion of its present facilities at 6400 N.W. Front Ave., to supply Northwest agricultural and industrial operations, including pulp and paper, with badly needed chemicals.

Glen E. More, general superintendent of the Portland plant, made the announcement, after filing a \$940,000 construction application with the CPA.

The new plant will be electro-chemical and will produce largely sodium chloride and potassium chloride.

Joins Penn Salt

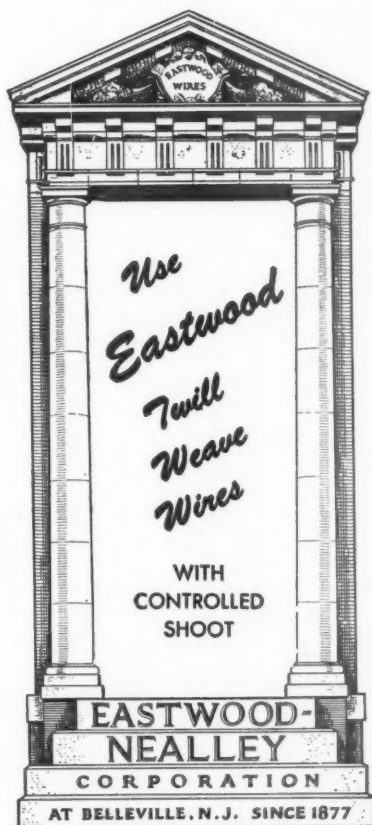
Richard A. Snyder, who served five years in the 9th Air Force including service in Europe, has joined the service department of Pennsylvania Salt Manufacturing Co. of Washington. He graduated from the University of Michigan.

Leaves Gulf States

Jack Englebert has resigned from Gulf States Paper Corporation, Tuscaloosa, Ala., to accept a position as research engineer with the Strickland Brothers Machine Company. Jack was an employee in the chemical laboratory. He served in the Army during World War II.



R. M. WADE & CO., one of largest distributors of industrial and agricultural pumping equipment in Pacific Northwest, has moved to enlarged quarters in Seattle at 818 First Ave. South. Seattle manager is FRED F. PRINGLE (above). Pump lines are Goulds, Peerless, Gardner-Denver and Barnes and specialized pumping equipment for pulp and paper industry.



Clarence Avery Joins KVP Board

Clarence Avery, prominent Mid-West industrialist, was elected to the board of directors of Kalamazoo Vegetable Parchment Co. on April 16. Mr. Avery succeeds to the directorship left vacant by the recent death of Steven Monroe who had been a member of the board since December of 1941.

"I consider Mr. Avery to be one of the outstanding industrialists of the Middle West and we feel very fortunate to have him on the KVP board," Ralph A. Hayward, president, told PULP & PAPER INDUSTRY.

Among important positions which are or have been filled by Mr. Avery include a directorship of the Federal Reserve Bank of the 7th Federal Reserve District, chairman of the board and president of Murray Corp., Detroit, and director of Manufacturers National Bank, Detroit. The new KVP board member is also a former chief engineer of Ford Motor Co.

William Halsey III

William Halsey III has joined the staff of the New Products and Market Analysis division of the Brown Company, the New York office announced recently from 500 Fifth Ave.

Mr. Halsey is a graduate of Princeton, class of '38, and was commissioned an ensign in the Navy in March, 1942. During 33 months in the Pacific he served as aviation supply officer in the USS *Saratoga*. He was also logistics planning officer on the staff of the commander of naval aircraft in the Pacific. He saw action at Guadalcanal, Bougainville, Rabaul, and in the Marshall and Gilberts. He was discharged last February with the rank of lieutenant and promoted to lieutenant commander April 1.

Chinese at Nepco Studies U. S. Methods

Wang Lien is the second Chinese technician to become a guest member of the staff at Nekoosa-Edwards Paper Co., Port Edwards, Wis., for the purpose of studying American methods of paper-making.

China is planning construction of a new kraft mill and expansion of its industry and has sent a number of technicians to this country. Mr. Wang will be in the U. S. three years.

Fred Erler Joins Westminister Paper Co.

Fred Erler, formerly assistant superintendent of the Marinette Paper Co. of Marinette, Wis., has joined Westminister Paper Co., New Westminster, B. C., as plant superintendent, according to announcement by President E. M. Herb.

Alcohol Plant Sales

Ethyl alcohol sales during the nine months' operation its alcohol-from-sulfite-waste plant in 1945 totaled \$518,000, according to Puget Sound Pulp & Timber Co. of Bellingham, Wash.

The plant was built on company property by the U. S. Defense Plant Corp. Savings by the government in its alcohol purchases, plus plant rental, were estimated at \$561,000 for the first ten months of operation, or about 51% of estimated cost to the government of the unit.

Complete STAINLESS STEEL Cylinder Moulds

Repeated tests have proved that the use of stainless steel cylinders is a distinct advantage in chlorinated acid-bleached stock washers and deckers. Our engineers have overcome the apparent difficulties in making complete cylinder moulds from stainless steel and we are now able to supply them without delay in both Type 316 and Type 304. Rods and winding wire are obtainable in stainless steel in either round rod or our own patented triangular rod and high-winding wire construction.

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Continental Can Expands In Paper for West Coast

Continental Can Co.'s paper division has acquired a modern factory building at 4950 Long Beach Ave., Los Angeles, for manufacture of a full line of paper products except fiber drums, according to Hans A. Eggers, vice president in charge of paper and plastics.

The building has a total floor space of 114,000 sq. ft., and is equipped with a loading dock and a six-car siding.

Changes Made In BFD Top Personnel

Recent changes in B-F-D Co. (formerly Berst-Forster-Dixfield), Pulp and Paper Division, made J. O. Julson the new general manager of the division; Dr. James E. Foote, assistant general manager; Walter E. Riley, to chief engineer; Dr. Raymond E. Baker, technical director, P. D. Bradley, superintendent of operations of the Plattsburg, N. Y. mill, and D. A. Hunter, superintendent of operations at the Ogdensburg, N. Y., mill.

Moulded Pulp Plant

Warren Philbrick, grandson of W. W. Philbrick, inventor of the Philbrick Cutterhead for lumber patterns, announces that he will establish a moulded pulp-groundwood products plant in Seattle to make aircraft parts, lamp reflectors, diaphragms, luggage, etc.

Idaho Converter

A paper and board converting plant under the name of Idaho Paper Box Co. has been organized at Caldwell, Idaho. Officers are James Watson, Parma, Idaho, president; Marshall Anderson, Nampa, vice president; and R. J. Clark, Caldwell, secretary-treasurer. Mr. Clark also is manager.

Addresses to Loggers

At the Willamette Valley Loggers Association in Eugene, Ore., May 3, Otto R. Hartwig and Ted Kepner of the C Z safety office; Billy Welsh, public relations, and Glenn Hawkins, superintendent of CZ's Columbia tree farm, were also speakers at the loggers' show.

Heads Community Chest

F. J. "Bill" Herb, vice president of Pacific Coast Paper Mills in Bellingham, was recently chosen to head the Bellingham Community Chest for 1946.

New Bag Plant

St. Regis Paper Co. has awarded a contract to Dominion Construction Co. for a new reinforced steel and concrete building to house its operations in Vancouver, B. C.

According to Manager R. Engness, the building will cost about \$200,000 and it will be ready for occupancy next winter. First floor will be devoted to storage of raw and finished products, and operations and office will occupy the second floor. Bag making machinery designed and built by the company's staff will be installed.

Wedding In Bellingham

A recent marriage was that of Miss Nell Jeffery, secretary to Mr. Ralph M. Roberg, vice president and sales manager of Puget Sound Pulp & Timber Co., and William Keyes of the electrical department of the pulp mill.

Leadbetter Co. Formed

Leadbetter Logging & Lumber Co. has replaced the name of the Charles K. Spaulding Lumber Co. on all operations which were sold to the Oregon Pulp & Paper Co., Salem, Ore., late last year.

The Spaulding name has been associated with timber holdings and the various phases of the lumber industry for the past 50 years.

Timber from the holdings will be used to feed two sawmills and the Oregon Pulp & Paper Co. mill at Salem.

Weiblen, Hoquiam Assistant Supt., Improves

Jack Weiblen, assistant superintendent of the paper mill of Grays Harbor Pulp & Paper Co., Hoquiam, Wash., is reported to have improved recently after an illness of about three months.

Pipe Fitters Win Longfibre Bowling

The play-off game to determine the championship in the Longfibre Bowling League of Longview Fibre Co., Longview, Wash., on April 12, was won by the Pipe Fitters team. This team was pitted against the Pulp Mill team, which had won the championship for the first half of the season just before Christmas. The Pipe Fitters were winners for the second half of the schedule.

The high single game for the series was 232 by A. Cloninger of the office team and the high series, 688, by E. Oglesby, Bag Plant.

At the annual dinner for all keggers April 22, at the Longview Country Club, H. A. Dauterman was elected league president for next season; M. Keeling, vice president, and C. A. Davis, secretary-treasurer.

Longfibre Kraftsmen Add New Members

The Longfibre Kraftsmen, organization of superintendents and supervisors of the Longview Fibre Co., on Feb. 20, heard Virgil Peters, chief maintenance engineer, describe relationship of maintenance departments to mill operations. He reported also that additional tests were going to be made of the DuPont industrial color scheme in painting certain departments.

Pattern making and castings were explained by Jim Kelley, assistant maintenance engineer. El Hagberg, machine shop foreman, told of the mechanics of roll grinding, and Gib Becker, pipe shop foreman, talked on lubrication on two cylinder board machines and one four-drinier paper machine.

New members introduced were Phil Brackett, shift chemist, Art Washburn, finishing room foreman, and Dan Phillips, box factory foreman, who were in service, and George Lauderdale, shipping foreman.

Longfibre Kraftsmen

At the Longfibre Kraftsmen meeting May 1 in Longview, Wash., C. R. Adams, chief accountant of Longview Fibre Co., presented a paper on depreciation. W. Q. Reiniger, assistant accountant; Orville Harrison, I. B. M. supervisor; Ed Ashe, assistant personnel manager; Harold Wall, chief chemist, and Bob Andrews, safety engineer, gave talks.

Frampton's Loss Of Flier-Son Confirmed

Charles G. Frampton, former superintendent and now consultant, Fernstrom Paper Mills, Inc., Pomona, Calif., has been officially informed by the government that his son, Capt. Charles Keith Frampton, Army Air Medal winner, is considered to have died following a flight over Bougainville Straits on Oct. 10, 1943, in a B-24 he was piloting. He had been reported missing.

Mrs. Keith Frampton served in the Army Nursing Corps in Europe and is now in the Veterans' Hospital, Bronx, N. Y., as a nurse.

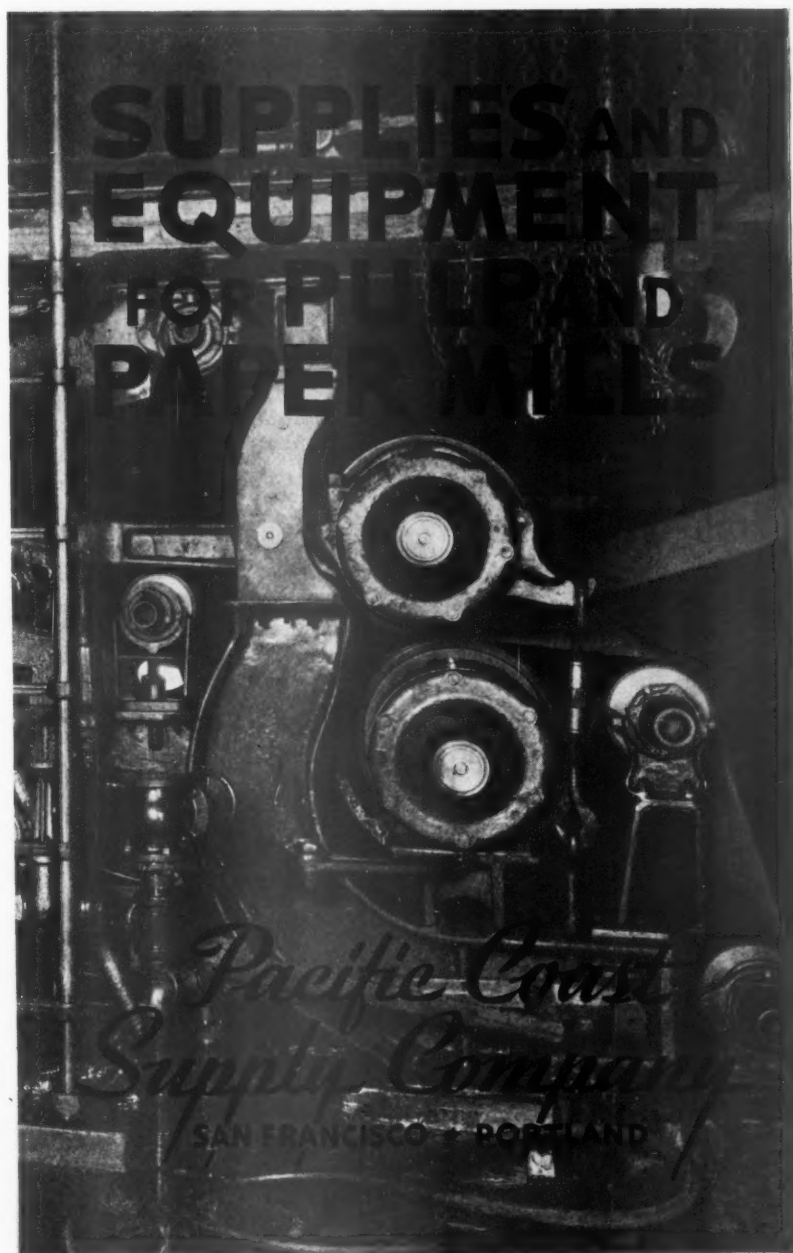
Charley Frampton's son, John, was recently commissioned as an ensign in the Navy, and received his discharge a few days later.

Turcotte and Hughes On Veterans' Committee

Lawson Turcotte, executive vice president of the Puget Sound Pulp and Timber Co., has been chosen chairman of the "Jobs for Veterans Committee" recently inaugurated in the city of Bellingham, Wash. Also serving on the committee is Victor Hughes, secretary of the Pacific Coast Paper Mills.

Bird Dog Wins

Pete Onkels, superintendent of Pacific Coast Paper Mills in Bellingham, Wash., knows a good bird dog when he sees one. His eight-year-old pointer, Golden Bess, made it a field day at the British Columbia Field Trials held at Ladner, B. C.



Travelers on Coast

Bill Garrity, Chicago office, Munising Paper Co., was a recent San Francisco visitor.

Ken Ozmun, president, Chicago Card-board Co., accompanied by Mrs. Ozmun, paid a visit to the Pacific Coast last month.

Larry Stedman, formerly Pacific Coast representative of Kimberly Clark Corp., Neenah, Wis., and now in the sales department of that firm, was visiting old friends on the Coast last month.

Plant Addition

A building permit was taken out in Mobile, Ala., at the turn of the year for an \$866,000 addition to the National Gypsum Co. plant there.



R. L. VAYO, newly appointed Mgr., Pulp Dept., St. Regis Paper Co., 230 Park Ave., New York City, who recently visited western mills.

Wallace of Mead Back

Hugh Wallace, with the Mead Sales Co., is now out of the service, and back at his office in New York.

Facial Tissue For Warrensburg Corp.

Warrensburg Pulp & Paper Corp., Warrensburg, N. Y., is erecting a new brick and steel building of 20,000 square feet floor area, and in this will be installed a new 136-inch paper machine for facial tissue. Toweling will eventually be made at the mill, according to Seymour I. Baum, vice president, who was interviewed recently at the mill.

Also being installed are two boilers totaling 900-h.p. and Riley stokers. Installations will be completed about June 15.

Warrensburg Pulp & Paper Corp., which has headquarters at 220 East 42nd St., New York City, took over the Warrensburg mill about three years ago from the old Schroon River Pulp & Paper Co., which had begun as a newsprint operation and later made hanging paper chiefly.

The new company, whose president is I. Baum, has devoted the mill to groundwood specialties. The same ownership operates Ashland Paper Mills, Ashland, N. H.; and the Marcellus Falls Paper Mills, Marcellus Falls, N. Y., making imitation kraft.

Pulp-Paper Industry Men Elected by Foresters

Representatives of Weyerhaeuser Timber Co., Champion Paper & Fibre Co. and Brown Co. were elected to the eleven-man council of the Society of American Foresters, headquarters, Mills Bldg., Washington, D. C. They serve two years.

Clyde S. Martin, chief forester for Weyerhaeuser, was elected vice president. The new president is Shirley W. Allen, professor of forestry, University of Michigan.

Others on the council include Walter J. Damtoft, assistant secretary, Champion Paper & Fibre Co., Canton, N. C.; Clarence S. Herr, assistant woods manager, Brown Co., Berlin, N. H.; Paul M. Dunn, forestry dean at Oregon State College, who is active in Coast TAPPI circles, and Arthur B. Recknagel, forestry consultant, State Conservation Dept., Albany, N. Y.

Economics of Pulpwood Publicized by Union Bag

As part of a program to encourage Georgia timber tract owners in proper management of their forests, Union Bag & Paper Corp. sent them several thousand copies of a booklet entitled: "Pulpwood, Key to Sustained Forest Income."

Changes in Howard Smith

Harold Crabtree, president of Howard Smith Paper Mills since 1930, has relinquished that position and becomes chairman of the board.

He is succeeded in the presidency by E. Howard Smith, who for the past 13 years has been vice president.

E. Keith Robinson, for the past 13 years vice president in charge of operations, has been appointed executive vice president.

Champion on Coast

The Champion Paper & Fibre Co., Hamilton, Ohio, has opened a San Francisco sales office at 220 Bush St., San Francisco.

Clarke Marion, vice-president of the company, and former manager of the Champion mill at Hamilton, is in charge.

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Government Paper Apparently Is Scarce

Rumors of government-hoarded paper stocks continue to fly along the eastern seaboard, but the New York office of PULP & PAPER INDUSTRY has been unable to pin down any definite evidence of such hoarding or find a trail leading to a government warehouse with "vast stocks." Neither had others, and Advertising Age was asking readers to supply factual data upon which some action might be taken.

Very little paper is selling as surplus property. Few if any government units know how much paper they have and where it is. This is especially true of the Army and Navy, and the paper division of CPA has professed to have no clear idea of the quantity and location of government stocks.

There are seven people now handling paper at CPA. Last month Col. J. Hale Steinman resigned as director and his place is being filled by Carroll Hanson, on leave from the Audit Bureau of Circulations for the past three years. Three of the seven are enforcing the newsprint inventory order, according to reliable report.

Representative Clarence Brown of the House paper committee has indicated to PULP & PAPER INDUSTRY that he believes there is no appreciable government hoarding and that current shortages will work themselves out.

Mayo, Who First Made Southern Pine Pulp, Dies

Edward H. Mayo, who in 1911 in Orange, Texas, produced the first successful batch of sulfate pulp from yellow pine after a long period of experimentation, died in Mobile, Ala., March 31. He was 77.

A native of Maine, the deceased started his career with the pulpwood crews of the Orino Pulp and Paper Co. in Maine. He transferred from the woods end into the mill, and after learning the process, became associated with a mill in Orange, Texas.

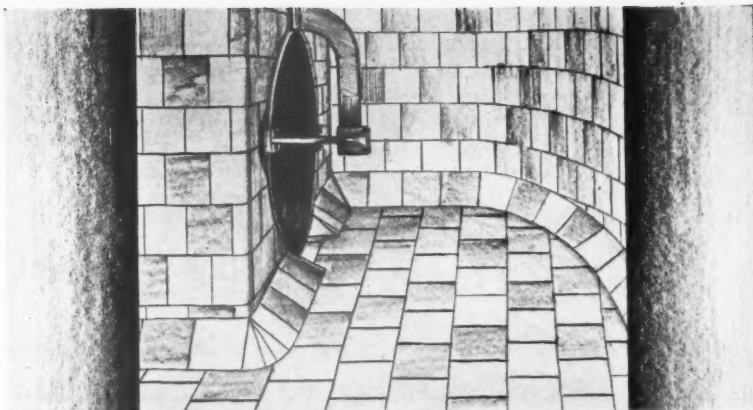
First attempt to make paper from Southern pine was by Smith and Thomas in Pensacola, Fla., about 1903. Lumbermen from Orange later bought the equipment and moved it to the Texas town. There finally, in 1911 Mr. Mayo produced sulfate pulp successfully.

Because of newness of the process, construction of a second mill at Moss Point, Miss., was viewed with much skepticism so that it was found necessary to finance the plant in England. Mr. Mayo went to Moss Point as general manager in 1913, and in 1928 when this plant was acquired by the Southern Kraft Corp., became production manager for all the Southern mills of that concern.

In 1932 he retired, but later was recalled to brief service by Union Bag and Paper Corp. and Florida Pulp and Paper Co.

Cameron Winders Go To India, France, So. America

Sirpur Paper Mills, Ltd., Hyderabad, India, has purchased a Type 19 174-inch Cameron winder for their paper machine. Cameron has noted a sharp upturn in its export business as a natural postwar development and has been making winders for mills in India, France, South Africa and South America.



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For economical and durable linings—consult Stebbins.



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Welsh Addresses Purchasing Agents

William D. Welsh, public relations, Crown Zellerbach Corp., addressed 300 purchasing agents and their wives at a purchasing agents convention in Seattle April 27 on the subject, "North America Unlimited—A Reliable Firm." Delegates attended from British Columbia, Oregon, Washington and Northern California.

Zellerbach Appointments

A. W. Akers, manager, Seattle division, Zellerbach Paper Co., has appointed Robert Murray to be general sales manager, Seattle division.

Mr. Murray was formerly assistant general sales manager at Salt Lake.

Francis H. Ware has been appointed manager of the resale merchandising department, Salt Lake City division. Mr. Ware had been on leave in the army both in Europe and in the Pacific.

Tours Latin America

O. W. Mielke, general manager, Blake, Moffitt & Towne Co., San Francisco, accompanied by Mrs. Mielke, has left for a two and a half month flying trip to Mexico, Central and South America.

Fortune to Double Issues

Last month there were indications that Fortune would henceforth publish 24 issues a year instead of 12, maybe blossom on the newsstands every two weeks at fifty cents per copy. It has until now sold for \$1.00 per copy or \$10 per year and not been available on the kiosks. While the publishers would not verify the changes, there were indications they were looking at the possibilities.

Detroit Co. Changes Name to Fabricon Products

Detroit Wax Paper Co., River Rouge, Mich., will henceforth be known as Fabricon Products, Inc. Coincident with the announcement of the change in name a new unit, designed to house the plastic and fiberboard division of the company and equipped with new machinery, has been put into production.

This company has been a pioneer in supplying of pulp plastic sheets for plastic manufacturers.

Pulp Mill Executives Buy Shingle Mill

A shingle mill at New Era, Ore., formerly operated by McMillan Brothers Co., has been purchased by three officials of Oregon Pulp and Paper Co., and has been incorporated as Williamette Shingle Co. Capital is listed at \$20,000, with F. W. Leadbetter, president; T. Osmond, vice president, and W. P. Donnelly, assistant secretary.

Heads Forest Management Research

Leonard I. Barrett, director of the Forest Service Central States Experiment Station at Columbus, O., since 1942, became recently the chief of the Division of Forest Management Research, U. S. Forest Service, Washington, D. C. He is a veteran of 19 years service in experiment station activities. He was born in Chicago, is 44 years old and attended the University of Michigan.

A neighborhood firm

exporting Northwest pulp and paper

AGNER & FREDRICKSON Co.

Colman Bldg.

Seattle 4

Established in Seattle since 1925

United Kingdom Newsprint Supply

New arrangements regarding 1946 newsprint supply from Canada and Newfoundland for the United Kingdom are set forth in the following statement by R. C. Doane, vice-president of Canadian International Paper Company:

Mr. Doane has just returned to Montreal from a visit to England during which, at the invitation of the British Government, he discussed the question of newsprint supply as representative of Canadian and Newfoundland producers. Mr. Doane's statement follows:

"Canadian and Newfoundland mills which have been supplying England with newsprint have reached agreement with representatives of the British Government and English newspaper publishers as to co-operation with the United Kingdom in its continued restriction to four-page newspapers as part of the present British austerity program.

"Under this agreement English publishers in 1946 will be allowed to purchase from Canada and Newfoundland 50,000 long tons. This modifies the British Government's earlier decision to suspend entirely the 224,000 long tons which English publishers had contracted to purchase from Canada and Newfoundland in 1946. The British Government has indicated that, to carry out the new agreement with Canada and Newfoundland, it will take steps to reduce its imports of Scandinavian pulp.

"The tonnage involved in these arrangements is a very small factor in the total supply situation since Canada and Newfoundland, in 1946, will probably produce something in excess of four million tons of newsprint. The important issue at stake, and the point successfully established by the new agreement, is the continuity of relationship between

Canadian and Newfoundland producers and British consumers.

"This continuity is preserved not only by the agreement for purchase and delivery of 50,000 long tons in 1946, but also by the further agreement that balance of the previous 224,000 long tons is not cancelled but deferred for possible shipment in 1947 and 1948. Exact arrangements for these years will be discussed further early next year.

"The importance of continuity of relationship has been recognized by the British Government as well as by producers and consumers. The

British Government's attitude has been indicated by Sir Stafford Cripps, president of the British Board of Trade, in a letter to Lord Rothermere, chairman of the British publishers' Newsprint Supply Company, confirming the British Government's agreement. In this letter Sir Stafford Cripps said:

"While we cannot go back upon the principle of severely restricting supplies of imported paper and pulp, we are prepared to readjust the imports between paper and pulp with the object of retaining contact with Canadian suppliers who have been so helpful during the war. We have no desire for any permanent break in these relations which we should regard as most unfortunate. . . . The Government will take steps to reduce the importations of pulp from Scandinavia by an equivalent quantity so that the total volume of newsprint will not be increased. You will appreciate that this is a severe handicap for our manufacturers and our decision should suffice to impress upon Mr. Doane and his colleagues the measure of our anxiety to do everything in our power to maintain our connections with the Canadian and Newfoundland industry."

Prominent Alabaman Heads Newsprint Co.

Plans for the establishment of a two-machine newsprint mill at the Childersburg (Ala.) Arsenal property are being advanced by the Coosa River Newsprint Co. It has been announced that Edwin L. Norton, of Birmingham, will serve as president and chief executive officer of the company.

Mr. Norton for many years has been an outstanding business executive in Alabama. He is executive vice president of Munger Realty Co. and Munger Mortgage Co.; board chairman of Birmingham-Southern College and of the Miles Memorial College. Other interests included board chairman of companies controlling Jacksonville and Birmingham radio stations. He was also chairman of the Birmingham branch of the Federal Reserve Bank of Atlanta, and head of the Birmingham Baseball Club.

Who Owns Puget Power?



Puget Power is truly a people's enterprise - American style. It is no power octopus. The average holdings of common Stock at the end of 1945 was only 114 shares. There were over 22,000 stockholders from all walks of life. No one of these stockholders held as much as 2% of the stock.

**PUGET SOUND
POWER & LIGHT CO.**

FRANK McLAUGHLIN, President